



NORTHFIRE DVTE-42

DIRECT VENT GAS FIREPLACE

FOR USE WITH NATURAL GAS OR
PROPANE



USERS

INSTALLATION

OPERATION & MAINTENANCE MANUAL

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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

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.

Installer: Please leave this manual with the appliance owner for future reference

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CAUTION

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperature and stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the appliance.

Clothing or other flammable material should not be placed on or near the appliance.

Do not operate this appliance with the glass front removed, cracked or broken. Be careful not to strike or slam the glass. Replacement of the glass should be done by a licensed or qualified service person.

Installation and repair must be done by a qualified service person. Any parts removed or opened for servicing of the appliance must be properly replaced prior to operating the appliance.

The appliance must be inspected before use and at least annually by a qualified service person. More frequent cleaning maybe required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartments, burners and circulating air passageways for the appliance be kept clean.

Patents Pending

INTRODUCTION

Congratulations for choosing an Archgard fireplace.

The Northfire DVTE-42 is one of the most advanced direct vent fireplace available. It is solidly designed using the latest technology and manufactured to the highest quality. It is our aim to provide you an appliance with many trouble free years of reliable service.

Some of the many features are:

- **Product Classification** The Northfire DVTE-42 is classified as a decorative gas appliance.
- **Flame Picture** The Northfire DVTE-42 has one of the more realistic flame pictures of any gas fireplace; it uses more expensive ceramic fiber (glows when impinged with flames) log set.
- **Solid Construction** The Northfire DVTE-42 is constructed mainly of heavy gauge galvanized and aluminized steel for long life and durability.
- **Optional "ON/OFF"** The gas control system is "remote" ready for your millivolt wall switch or wireless remote control.

Please read the manual carefully prior to installation and operation of the appliance. Proper installation, operation and maintenance of the appliance will provide you with many years of enjoyment. We recommend you record the following information:

Fireplace Model Number _____

Fireplace Serial Number _____

Date of Installation _____

Type of Gas Used by the Fireplace _____

Dealer's Name _____

GENERAL INFORMATION

APPLIANCE CERTIFICATION

This appliance is tested and certified to the following US and Canadian gas appliance standards.

- ANSI Z21.50a-2001/CSA 2.22a-2001, Vented Gas Fireplaces ,
- CAN/CGA-2.17-M91, Gas-Fired Appliances for Use at High Altitudes

Please contact Archgard Industries Ltd., if you have any questions regarding the certification of this appliance.

INSTALLATION CODES

This appliance must be installed by a qualified gas appliance installer.

The installation must conform with the local codes or, in the absence of local codes, with the current National Fuel Gas Code, ANSI Z223.1/ NFPA 54, in the US or Installation Code, CAN/CGA-B149, in Canada. Electrical connections and grounding must conform with local code, or current National Electrical code, ANSI/NFPA No. 70-1987, in the US and in Canada, the current Canadian Electrical Code, CSA C22.1.

SPECIFICATIONS

	Natural Gas (NG)	Propane (LP)
Manifold Pressure	3.5 in. W.C. (0.9 kPa)	10.0 in. W.C. (2.5 kPa)
Min. Supply Pressure for Purpose of Input Adjustment	4.0 in. w.c. (1.0 kPa)	11.0 in. w.c. (2.8 kPa)
Orifice Size	#42 DMS (2.36 mm dia.)	#52 DMS (1.60 mm dia.)
Nominal Input Rating	25,000 BTU/hr (7.1 kW)	25,000 BTU/hr (7.1 kW)
Electrical Rating	120 VAC / 60 Hz / Less than 2A	120 VAC / 60 Hz / Less than 2A
Elevation	0-4500 ft (0-1372 m)	0-4500 ft (0-1372 m)
Primary Air Opening	5/16 in. (8.0 mm)	Fully open

HIGH ALTITUDE INSTALLATION

When installing this appliance beyond 4500 ft. (1372 m) above sea level. The appliance must be properly de-rated and installed according to local codes, in the absence of local codes, with the current National Fuel Gas Code, ANSI Z223.1/ NFPA 54, in the US or Installation Code, CAN/CGA-B149, in Canada.

APPLIANCE DESCRIPTION

FLAT FRONT



Top Louvers
(removable)

Tempered glass front

Hinged bottom louvers
for control access

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OPTIONAL KITS



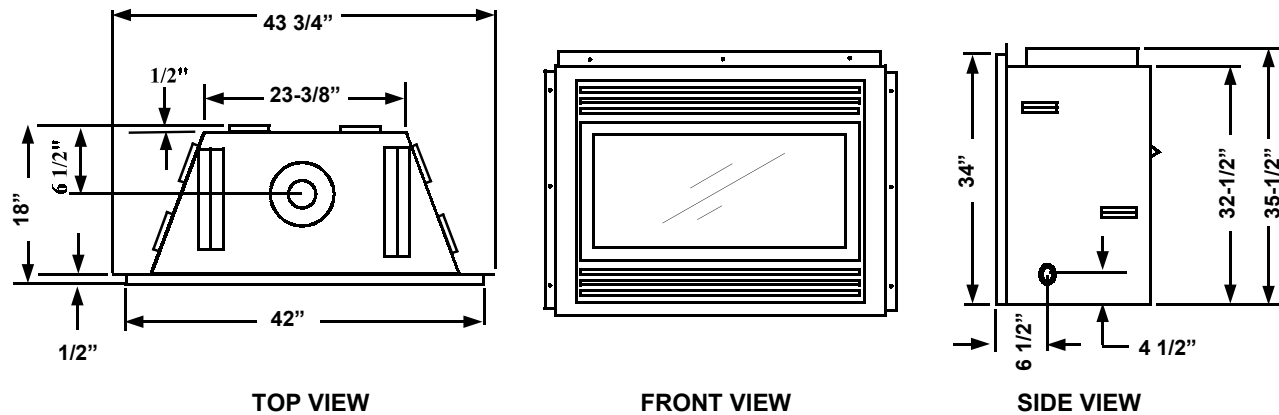
Alternating black / gold
louvers

Optional Brick Panels

Optional Convection
fan Blower Kit (120
Volt 60 Hz less than
2 Amps)

DIMENSIONS AND CLEARANCES

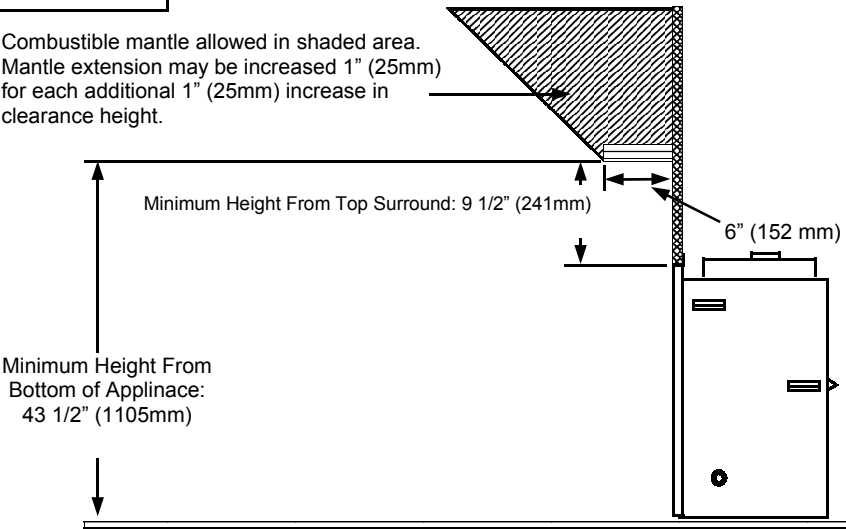
APPLIANCE DIMENSIONS



CLEARANCES TO COMBUSTIBLES:

BACK	0" to stand-offs
SIDES	0" to stand-offs
TOP	0" to stand-offs
BOTTOM	0"
ADJACENT SIDE WALL	1" to side of faceplate
MANTLE	see diagram
VENT	1" to outside side and bottom surface, 2" to outside top surface.

MANTLE CLEARANCE



INSTALLATION INSTRUCTIONS

PRECAUTIONS

- This appliance must be installed by a qualified gas installer and the installation must conform to the installation codes.
- Provide adequate clearance around air openings of the appliance. Never obstruct front openings.
- Provide adequate clearances for proper operation and servicing of the appliance.
- This appliance must be properly connected to a venting system.
- This gas appliance must not be connected to a chimney serving a separate solid-fuel burning appliance.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.
- Verify proper operation after servicing.
- Do not use substitute materials.
- Do not abuse glass doors by striking or slamming shut.
- Do not use abrasive cleaners.
- Use only approved fireplace glass cleaner for cleaning your glass.

LOCATING GAS FIREPLACE

This appliance must be installed in any location that is free of plumbing, electrical wiring and heating or air conditioning ducts. Select a location that is accessible for venting. See ALLOWABLE TERMINATION LOCATIONS.

GAS CONNECTIONS

Have your gas supplier or a qualified gas fitter run a gas supply line into the fireplace. The line must be properly sized and fitted according to the installation codes. Immediately up stream of the supply connection, the fitter shall provide an accessible manual shut-off valve and a 1/8 NPT plugged tapping accessible for connection to a test gauge.

CAUTION: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa). Failure to do so will damage the appliance's gas valve. Such damage is not covered by the manufacturer's warranty.

INSTALLATION INSTRUCTIONS Cont...**Natural Gas Pressure Settings:**

The inlet supply or line pressure must be a minimum of 4.0" wc (1.0 kPa) and a maximum of 14" wc (3.5 kPa). The gas orifice has a #42 DMS drill size.

<u>ELEVATION</u>	<u>INPUT RATING</u>
0-4500 ft. (0-1372 m)	25,000 BTU/hr (7,100 watts)
4500 ft. (1372 m) +	25,000 BTU/hr (7,100 watts) less 4% per 1000 ft. (305 m)
Please contact your local distributor for the appropriate orifice size.	

Propane Pressure Settings:

The inlet supply or line pressure must be a minimum of 11" wc (2.8 kPa) and a maximum of 14" wc (3.5 kPa). The orifice has a #52 DMS drill size.

<u>ELEVATION</u>	<u>INPUT RATING</u>
0-4500 ft. (0-1372 m)	25,000 BTU/hr (7,100 watts)
4500 ft. (1372 m) +	25,000 BTU/hr (7,100 watts) less 4% per 1000 ft. (300m)
Please contact your local distributor for the appropriate orifice size.	

NOTE: THE INPUT RATING SHOULD ALWAYS BE CHECKED AFTER FIRST INSTALLING THIS APPLIANCE. To do this, reduce the background flow rate to a minimum (this flow should remain constant for the next part of the test), time the meter, light the fireplace and operate it on high and take another reading after 15 mins. Check with your gas supplier for the gas BTU content at your elevation. Input is the rate of flow—background flow multiplied by the heating value of the gas (cubic feet/hour x BTU per cubic feet). Adjust the manifold pressure so that the unit does not operate above the rated input. To do this, remove the screw dust cap on the valve and adjust the screw inside the tube so that the maximum input is correct. Reinstall the screw dust cap when complete.

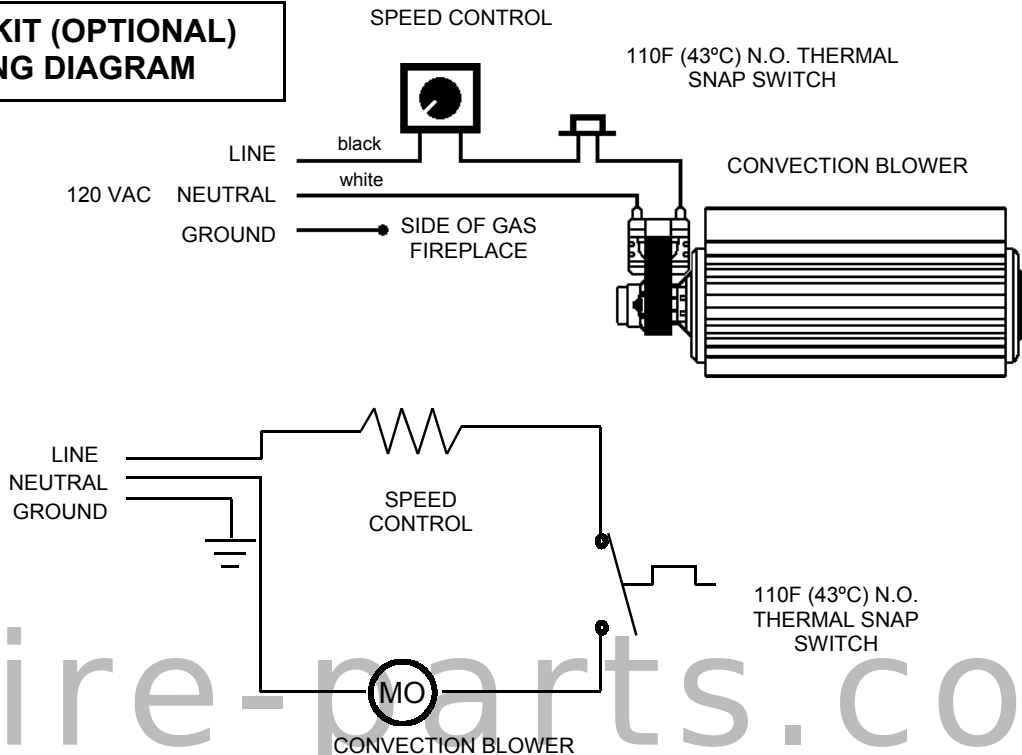
ELECTRICAL CONNECTIONS

The Northfire DVTE-42 has available an optional convection fan kit that can be installed into the fireplace (follow the installation instructions provided with the kit)

If the optional fan kit will not be provided at the same time the unit is installed have a qualified electrician run a 120VAC supply line to the lower left side of the fireplace before installing the appliance into the framing. He should leave 18" (460mm) of the supply line free for ease of connection to the convection fan kits junction box.

INSTALLATION INSTRUCTIONS Cont...

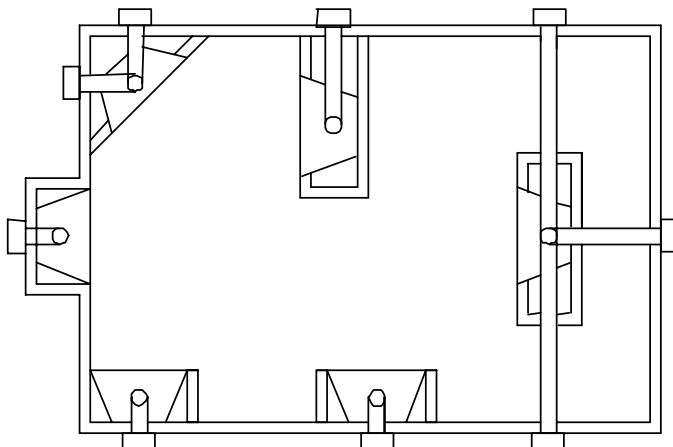
FAN KIT (OPTIONAL) WIRING DIAGRAM



VENT TERMINATION

1. See ALLOWABLE TERMINATION LOCATIONS (page 12) and establish a suitable vent termination location.
2. In heavy snowfall areas make sure vent termination is located where it cannot be blocked by snow or snow from snow removal equipment.
3. Locate vent termination away from plants, bushes or any other object near the vent termination that will interfere or obstruct the air flow around it.
4. DO NOT recess vent termination into walls, sidings or planters.
5. Vent terminations located below 7ft from grade level or anywhere that it can be a burn hazard to the public, such as patios and balconies, must be protected with an Archgard approved termination cage (part number C-1)

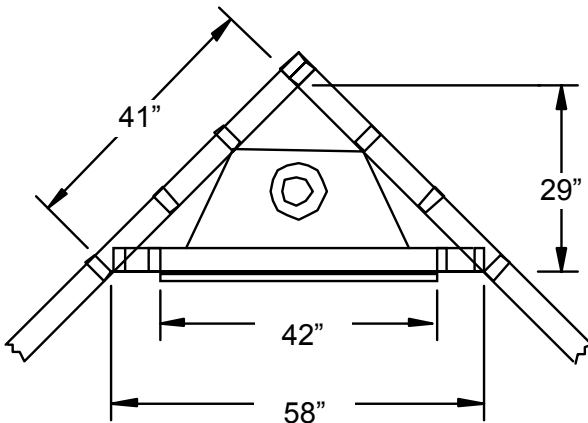
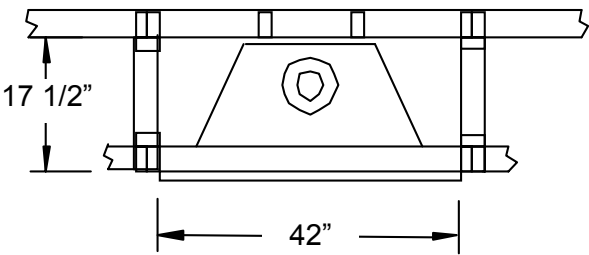
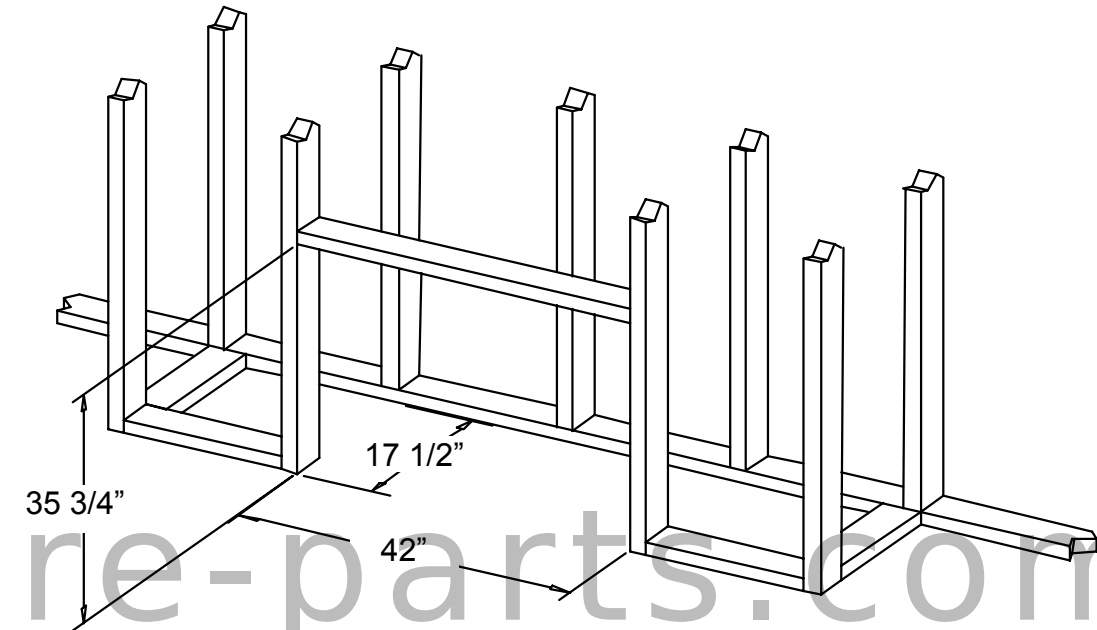
ALLOWABLE TERMINATIONS LOCATIONS.



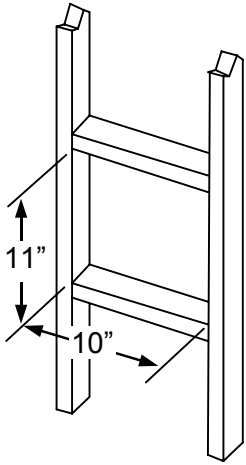
See venting chart for maximum and minimum vertical/horizontal venting configurations.

INSTALLATION INSTRUCTIONS Cont...

FRAMING DIMENSIONS



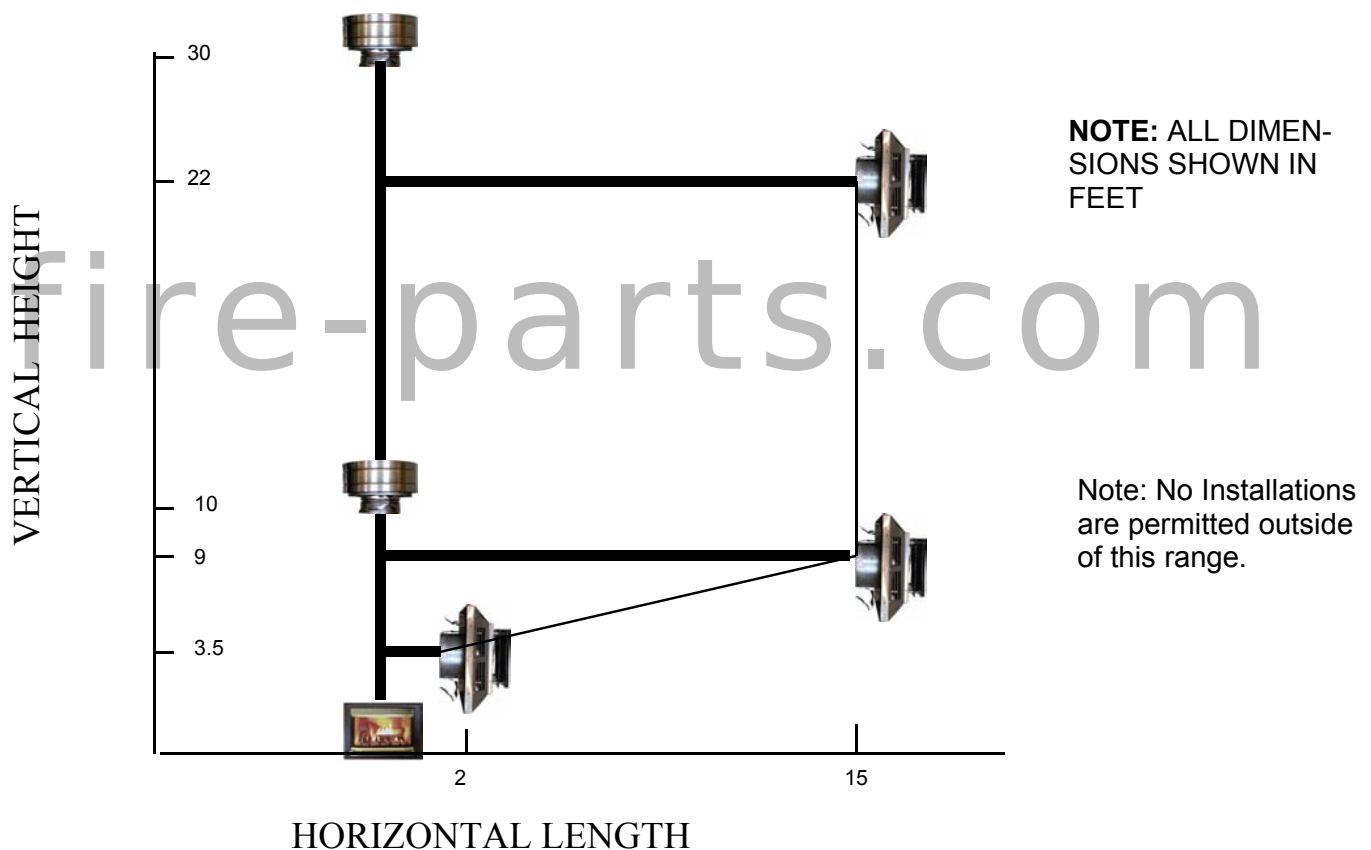
TERMINATION FRAMING



NOTE: Be sure to include angle the vent pipe (1/4" rise per foot of horizontal length).

INSTALLATION INSTRUCTIONS Cont...**VENTING**

The appliance will not function without being connected to a proper venting system. This appliance may only use direct vent system supplied by Archgard, or for all vertical terminations either Simpson Dura-Vent direct vent system (type "GS" series) or with Metal-Fab Inc direct vent system (type "TDV " series) together with Archgard SDK-1 adapter.



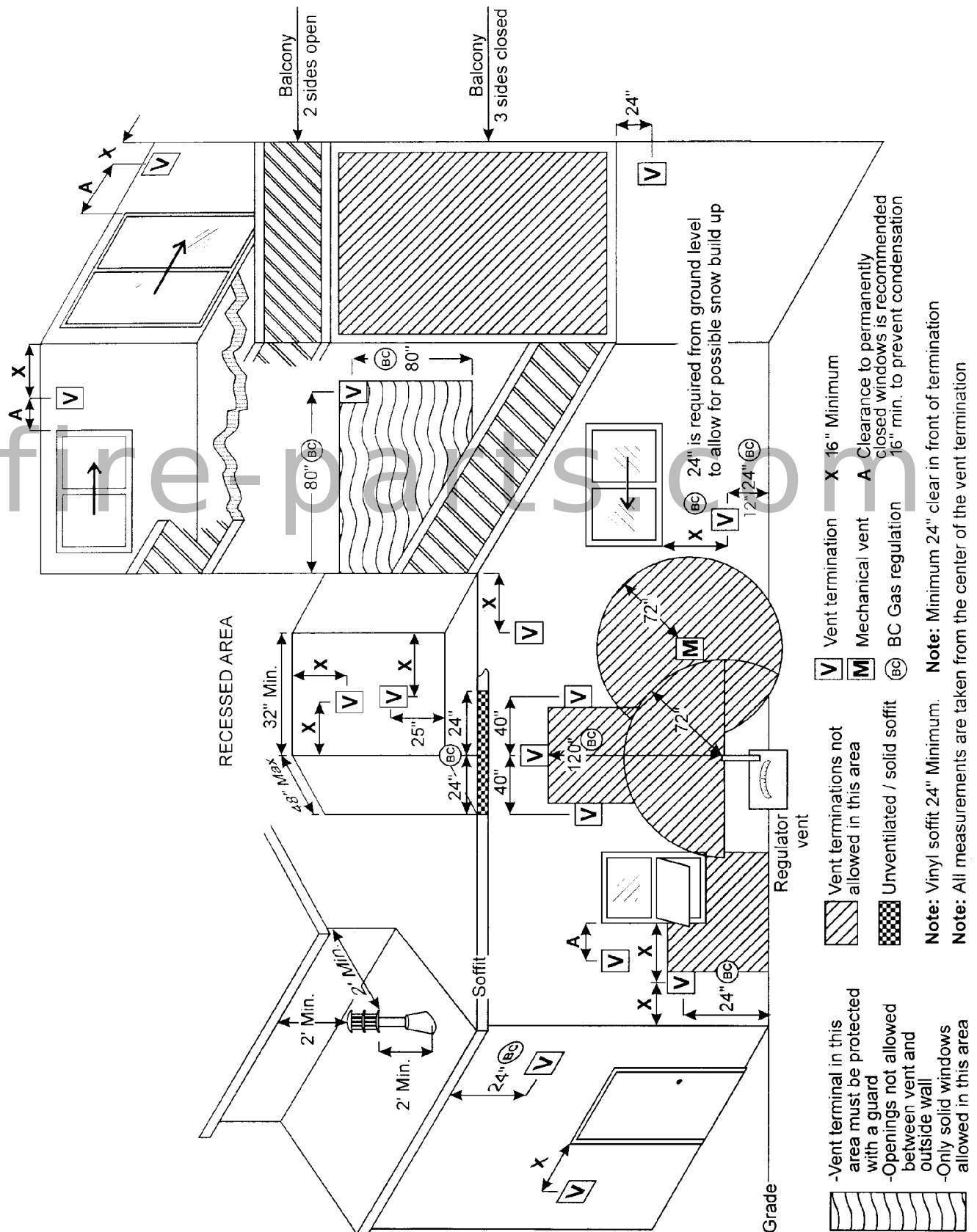
- Chart is for one 90° bend, with 1/4" (7 mm) vertical raise minimum per foot of horizontal length.
- For each additional 90° or two 45°, add one foot of vertical height.
- Maximum three 90° bends, or equivalent.
- Minimum 2 ft (610 mm) straight length between bends.

VENTING ABOVE ROOF OF THE HOUSE USING A VERTICAL TERMINATION

Use Simpson "Dura-Vent" or "Metal-fab" listed direct vent systems for all vertical vent termination applications (through the roof). **Do not mix component parts.**

Please follow these venting instructions as strictly as possible to obtain the best performance from the appliance.

ALLOWED TERMINATION LOCATION



INSTALLATION INSTRUCTIONS Cont...

VENTING Cont...

For best venting performance, here are some general venting rules that we recommend:

1. Use only Archgard, Simpson Dura-Vent or Metal-fab direct vent systems and components.
2. Maintain a minimum of 1" (26 mm) clearance to combustibles from the outside surfaces of vertical vents and minimum of 1" (26 mm) sides and bottom, and 2" (51 mm) from top surfaces of horizontal vents.
3. Observe any local code restrictions, if any, regarding the installation of this type of gas appliance.
4. Observe the venting chart given in this manual.
5. Use vent spacers between the inside and outside vents at every 3 ft (915 mm) intervals (Archgard vent kits only).
6. Never slope horizontal vents downwards.
7. Maintain at least a rise of 1/4" (7 mm) for every 1 ft (305 mm) of horizontal vent.
8. Terminate the vent with a vent termination cap (for horizontal terminations) supplied by Archgard Part # TK-1 or (for vertical terminations) Simpson Dura Vent or Metal-fab.
9. Support horizontal vents every 3 ft (915 mm) to prevent it from sagging.

APPROVED VENT COMPONENTS

PART #	DESCRIPTION
TVK-1	Flex Vent Kit with 36" vent length (includes TK1)
TVK-2	Flex Vent Kit with 60" vent length (includes TK1)
TK-1	Horizontal termination head only
VSD-1	Vinyl siding deflector
SDA-1	Appliance to vertical direct vent pipe system
SDA-3	Flex to Simpson Dura-Vent system adapter
DV-GS	Simpson Dura-Vent venting system
TDV series	Metal-fab venting system

VENTING CONNECTION

The intake pipe shall be securely fastened to the appliance and to the terminal and all joints shall be secured using a minimum of 3 screws evenly spaced around the pipe.

Approximately 1" from the end of the 4" pipe outlet at the appliance and at the 4" terminal inlet apply a bead of Mil Pac 1/4" wide. Slide the 4" pipe onto the appliance and secure with 3 screws evenly spaced to the outlet. Repeat the procedure at the termination cap.

Install a vent spacer between the outer and the inner liner to maintain clearances. Spacers shall be installed at every 3 Ft of horizontal run and at every change of direction. (See diagram)

Clearance to combustible material and fire-stops shall be install as required by the installation codes.

INSTALLATION INSTRUCTIONS Cont...

VENT KIT COMPONENTS (TVK-1)



Termination



Fire-stop



Sleeve



7" and 4" flex
vent lengths
(compressed)



Cement



Screws

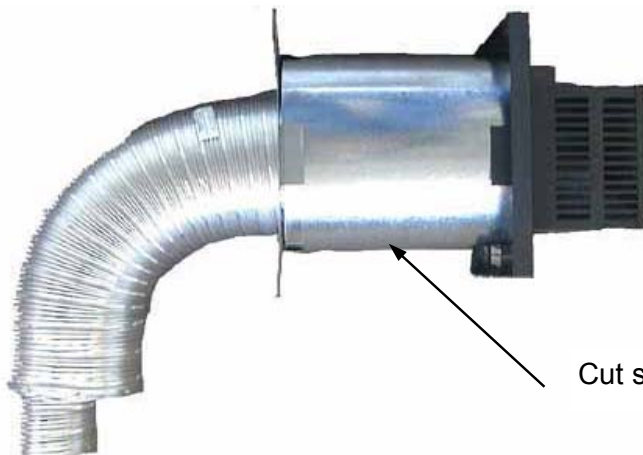


Spring
spacers

VENT ASSEMBLY



4" exhaust vent
with spring spacers



Vent system
assembled

Cut sleeve to fit wall thickness

INSTALLATION INSTRUCTIONS Cont...**GLASS DOOR**

WARNING: Do not attempt to remove the glass door when the appliance is hot.

WARNING: Do not abuse the glass such as striking or slamming shut

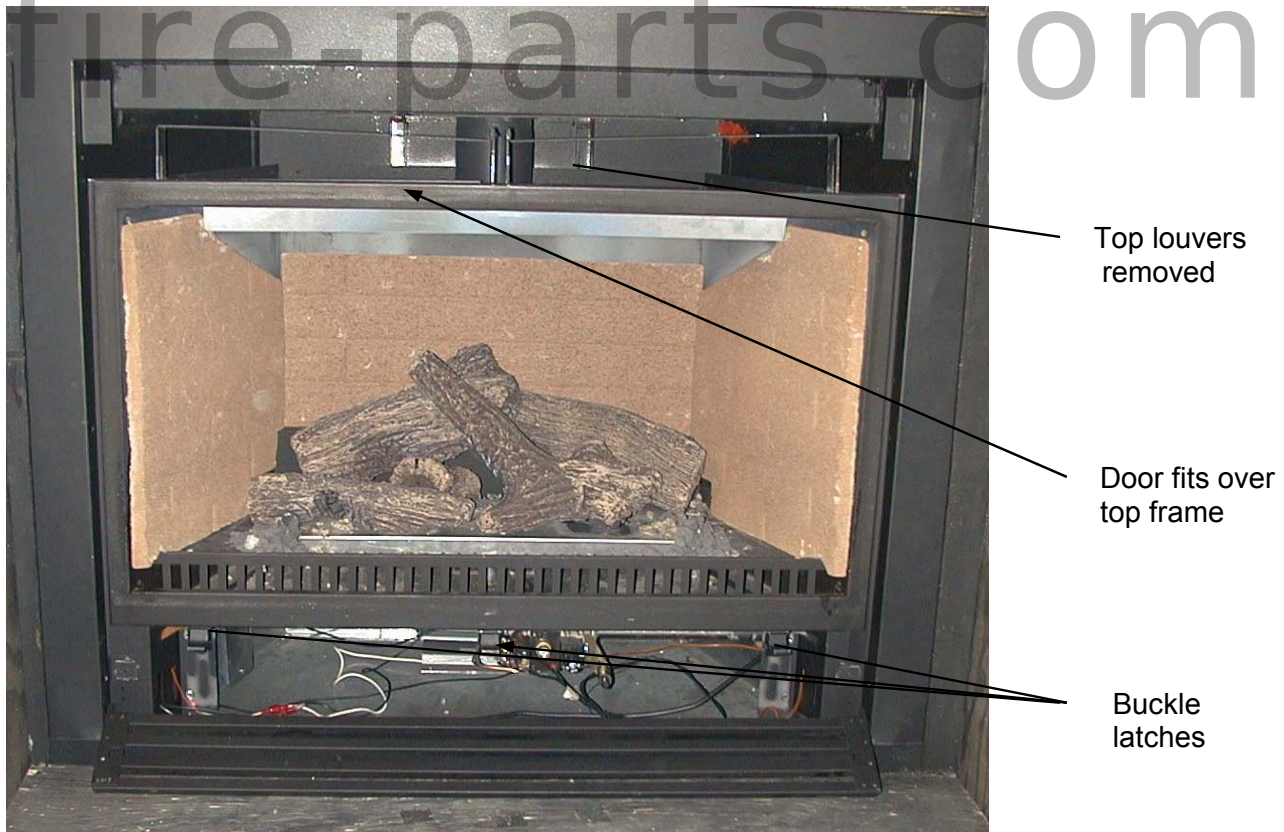
Removing the Glass Door

Remove the top louver by lifting off and open bottom louver.

There are 3 buckle latches under the door frame. Lift the lever on the back of the latches to release them. Unhook the latches from the bottom of the door. Swing the bottom of the door towards you. Lift up on the whole door to unhook the top of door from the body. Carefully remove the door and put it away in a safe location where it cannot be scratched or damaged.

Replacing the Glass Door

The reverse procedure of Removing the Glass Door.



INSTALLATION INSTRUCTIONS Cont...**LOGS AND EMBERS**

Rear Left log



Rear Right log



Front Left log



Front Right log



Center top log



Coals



Embers

LOG PLACEMENT

- Locate the front/left log on the locator pins on the burner then the rear/right log on the pin located on the firebox and burner then the center/top log on the single pin on the burner now place the rear/left log on the pin of the burner (and resting on top of the center/top log), place the last front/right log onto the 2 pins located on the burner (the branch rests on top of the rear/left log) .
- Carefully place the ember chunks and coals on the firebox floor and on top of the burner. DO NOT cover the entire surface of the burner and must be used sparingly when operating on propane fuel
- Do not allow the embers to obstruct the burner ports.



WARNING: Do not place logs in any other configuration than that shown. Under no circumstances are logs to be modified.

OPERATION INSTRUCTIONS**FOR YOUR SAFETY, READ BEFORE LIGHTING****INITIAL OPERATION**

- Check that the appliance is properly vented and connected to the gas supply.
- Check that the logs and branches are properly placed.
- Check that all external parts, such as grills, door and faceplate are properly attached and fastened.
- Check that the unit is clean and especially there are no finger prints left on any exterior fireplace surfaces as high temperature can bake these prints permanently.

NOTE : When operated for the first few times, the appliance will emit some odor and fumes. This is due to the heat from the appliance evaporating the oils and solvents used in fabricating the appliance. Close off the room to the rest of the house and open all windows. Keep the room well ventilated as smoke alarm may sound. Run the appliance continuously for at least 4 hours to allow paint to cure.

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WARNING : If you do not follow these instructions exactly, a fire or explosion may result, causing property damage, personal injury or loss of life. Do not operate the appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

OPERATION INSTRUCTIONS Cont..

LIGHTING INSTRUCTIONS (copy of instruction plate found on the unit)

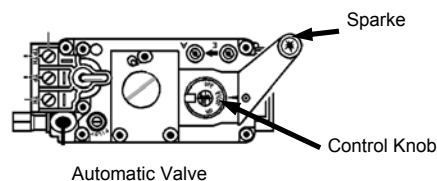
FOR YOUR SAFETY READ BEFORE

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

- | | |
|---|--|
| <p>A. This appliance has a pilot which must be lighted by a spark ignitor. When lighting the pilot follow these instructions exactly.</p> <p>B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.</p> <p>WHAT TO DO IF YOU SMELL GAS</p> <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • If you cannot reach your gas supplier, call the fire department. <p>C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand don't try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.</p> <p>D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.</p> |
|---|--|

LIGHTING INSTRUCTIONS

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. STOP! Read the safety information above on this label. 2. Set the remote switch to "OFF". 3. Turn off all electric power to the appliance. 4. Open lower louvers or access door. 5. Press slightly and turn the control knob clockwise ⤵ to the "OFF" position. 6. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! and follow instruction "B" above. 7. Find pilot. It is located between the logs near the center behind the burner. 8. Press slightly and turn control knob counterclockwise ⤴ to "PILOT". Depress knob and light pilot by repeatedly pressing the sparker. Once flame is established, hold knob | <p>depressed for approximately 30 seconds. Release knob. If pilot should go out, repeat steps 3 to 5.</p> <ul style="list-style-type: none"> • If the knob does not pop up when released, stop and immediately call your service technician or gas supplier. • 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. <ol style="list-style-type: none"> 9. Turn the control knob counterclockwise ⤴ to the "ON" position. 10. Set the remote switch to "ON". 11. Turn on all electric power to the appliance. 12. Close louver or access door. |
|---|---|



TO TURN OFF GAS TO APPLIANCE

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Set the remote switch to "OFF". 2. Turn off all electric power to the appliance if service is to be performed. | <ol style="list-style-type: none"> 3. Open lower louvers or access door. 4. Press slightly and turn control knob clockwise ⤵ to "OFF". Do not force. 5. Close lower louvers or access door. |
|--|--|

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MAINTENANCE

CAUTION : Do not conduct maintenance on the appliance while it is operating or while it is still hot.

CLEANING THE APPLIANCE

The exterior painted surfaces, glass and trims may be cleaned with a soft, non-abrasive cloth and water or a suitable, mild, non-abrasive cleaner.

Regularly:

- Clean and remove any lint accumulations or debris from the grills and in any combustion and convection air passage ways.
- Keep the appliance area free from combustible materials, such as paper, wood, clothing, gasoline and flammable solids, liquids and vapors.
- Visually check the height and color of the burner and pilot flames.

Every 2 to 3 months:

- Remove the glass door and clean the inside of the glass with a soft, non-abrasive cloth and water or a suitable, mild, non-abrasive cleaner. **DO NOT CLEAN WHILE HOT.**
- Carefully remove the logs and gently brush off any loose carbon deposits. This job is best done outside the house, wearing a dust mask. The logs are very fragile, take care not to break them. **Do not wash logs with any liquid.** While logs are removed, also remove the coals and “embers” and check that all burner openings are not obstructed. It is recommended you use a vacuum cleaner to clean off any dust or lint.
- After cleaning, the logs, coals and embers must be replaced as per the instructions in this manual.

Once a Year have a qualified service technician:

- Completely inspect the appliance and the venting system.
- Clean and remove any lint accumulations or debris in the firebox, on the burners, on the pilot, at the primary air opening on the burner and in any combustion and convection air passage ways.
- Check the safety system of the gas valve and the appliance.

WARNING : All parts removed or disturbed including guards and grills must be properly replaced after maintenance. Service and repair must be conducted by a qualified service person. If these instructions are not followed, a fire or explosion may result, causing property damage, personal injury or loss of life

TROUBLE SHOOTING

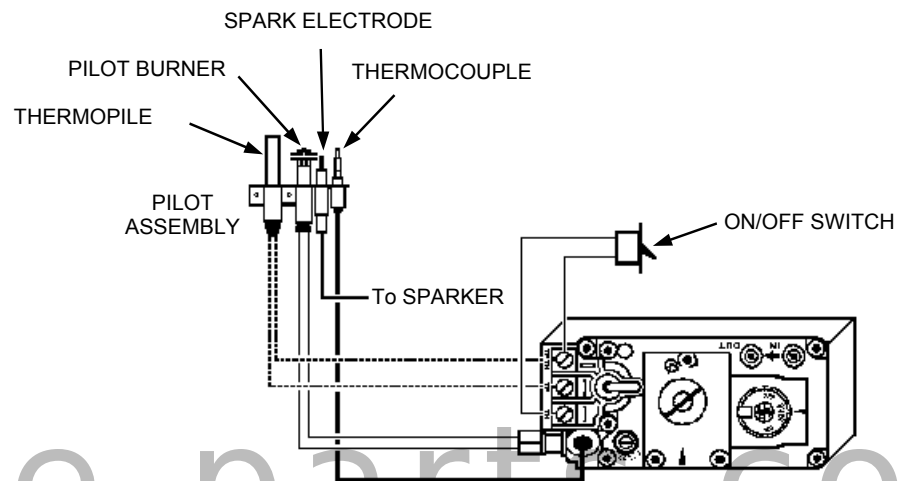
Please check to make sure the instructions are followed exactly before attempting trouble shooting of the appliance.

WARNING: Trouble shooting and servicing of gas and electrical devices of the appliance should only be conducted by a qualified service technician.

SYMPTOM	ACTION
Pilot will not light after pressing the sparker many times.	1. When lighting the appliance for the first time after installation or after servicing, there is air in the gas line. It can take a while for all the air to purge out of the line before gas can reach the pilot and ignite. 2. Check to make sure the gas supply to the appliance is turned on and there is adequate gas supply pressure to the appliance. 3. Check for sparks between the spark electrode and the pilot head when the sparker is pressed. If there is no spark, a. Check for broken or poor connection from the sparker to the electrode. b. Check for the spark shorting or arcing at other locations. c. Check for defective sparker. d. Check for defective spark electrode. e. Check for corrosion on the electrode tip (clean if required). 4. With the door removed, try lighting the pilot with a match. a. If air is blowing on the flame of the match, hold the control knob in at the 'PILOT' setting until all the air is purged out of the line. b. If there is no gas or air coming out of the pilot and there is gas pressure to the appliance, the pilot orifice may be blocked or the gas valve may be defective.
Pilot will not remain on after being lit.	1. Press the control knob all the way in. 2. Hold the control knob in for a longer period of time. 3. If you are trying to re-light the pilot immediately after you have shut-off the pilot, you have to wait 2 minutes for the valve to reset. (built in additional safety feature) 4. Check to see if the pilot flame is large enough to reach and surround the thermocouple. If the flame is too small, check for correct gas supply pressure. If pressure is within spec, adjust the pilot flame size with the screw on the valve. If the flame cannot be adjusted, there might be some debris obstructing the pilot orifice, or a wrong size pilot orifice. 5. Check for poor connection of the thermocouple to the valve. 6. Check for proper millivolts of the thermocouple. The thermocouple should generate at least 30 mV or it is defective. 7. Check for defective gas valve.
The main burner does not turn on with the pilot lit.	1. Check to make sure the control knob is turned to the 'ON' position. 2. Allow enough time for the pilot to heat up the thermopile to generate sufficient voltage to activate the valve.

TROUBLE SHOOTING Cont...

SYMPTOM	ACTION
The main burner does not turn on with the pilot lit. Cont...	3. Check that the remote control or the wall switch is turned on. 4. Check for weak pilot flame. If flame is weak, check gas supply, check pilot flame adjustment and check for blockage of pilot orifice. 5. Check all connections to the valve for tight electrical contact. 6. Check for 400-500 mV from the thermopile with the burner off and 200-250 mV with the burner on. If the voltages are lower, the thermopile is defective. 7. Check for defective gas valve. 8. Check for adequately sized on/off control wire (too small for long runs).
The main burner shuts off when the appliance is warm.	1. Check for good pilot flames on the thermopile (see page 24). 2. Check for good voltage from the thermopile. 3. Check for proper functioning of venting system. 4. Check wire connections. Expansion from heat affects a loose connection
Sooty deposits on the glass door.	1. If the flame is yellow and lazy, check for lint etc. around the burners primary air shutter. Increase primary air by opening the primary air shutter if necessary. 2. Check for proper placement of the logs and branches. Ensure logs and burner are clean. See that section in the instruction manual. 3. Check for obstruction of the burner ports by the embers. See that section in the instruction manual. 4. Check for proper venting and blockage of the vent termination. 5. Check manifold pressure and clock input rating for over-firing. 6. Check for the quality of fuel used (specially propane)
Sharp blue flames with flames lifting off the burner at the ends.	1. Too much primary air. Reduce primary air by closing the primary air shutter. During cold temperatures, some flame lifting may occur during start-up.
Optional Convection blower does not turn on (if installed).	1. The convection fan is thermostatically controlled. It will only turn on when the appliance is warmed-up. This normally takes up to 15 minutes after starting the appliance. 2. Check the 120 VAC electrical supply to the appliance. 3. Check for proper mounting of the thermal snap disc. 4. Check electrical connections. 5. Check for defective thermal snap disc. 6. Check for defective convection blower speed controller. 7. Check for defective convection blower.

WIRING DIAGRAMS**VALVE CONNECTIONS**

SERVICING

SERVICING UNDER WARRANTY

Before servicing, read the terms and conditions of the Archgard warranty at the back of the manual. Contact the Archgard authorized dealer which you have purchased the appliance from and provide him with details of the problem and the installation information which the installer has fill out at the back of the manual.

WARNING: Servicing of this appliance **must be conducted by a qualified service technician**. Improper servicing, adjustment or alteration of this appliance may cause property damage, personal injury or loss of life. All servicing should be conducted with the appliance cold. All replacement parts must be authorized by Archgard for suitability.

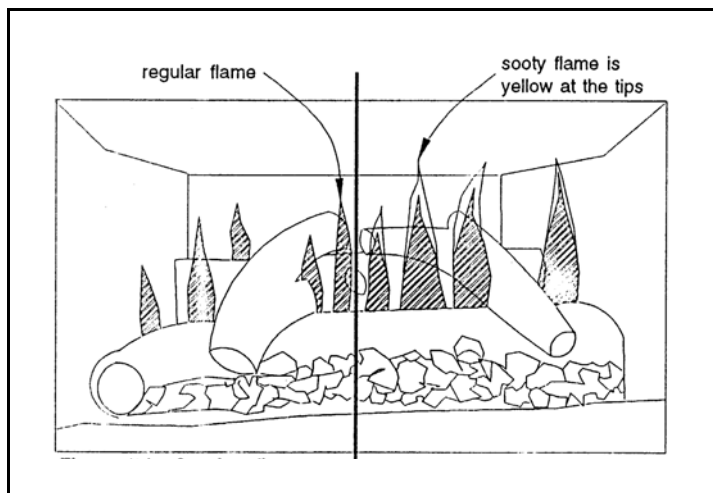
ADJUSTING PRIMARY AIR

- Remove the glass door.
- The primary air shutter is located underneath the burner.
- Loosen the air shutter set screw with a Philips ('+') screwdriver.
- Rotate air shutter with a flat tip screw driver. The primary air opening size can be easily seen with a flashlight.
- Tighten the air shutter set screw after adjustment.

CAUTION: Adjust the primary air with the appliance cool to the touch.

CORRECT FLAME PICTURE

The left side shows correct adjustment. The right side shows yellow sooty flames requiring increase in shutter opening or cleaning of shutter area due to lint buildup.



SERVICING Cont...**CHANGING MAIN BURNER ORIFICE**

- Remove the glass door, log branches and the front log.
- Unscrew the 2 screws holding the burner to the floor.
- Lift the burner up and away from the orifice cap.
- Use a 1/2" wrench to remove the orifice cap together with a 9/16" wrench on the fitting (under the firebox).
- Change the orifice cap. Use a small quantity of gas thread seal compound. Do not over tighten.
- Set the primary air shutter on the burner according to the specifications.
- Replace the burner, front log, branches and the glass door.
- Check for leaks.

CHECKING SUPPLY AND MANIFOLD GAS PRESSURE

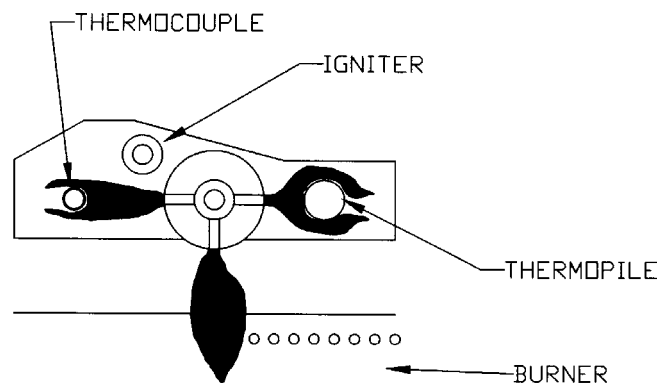
- Open the lower grills.
- The pressure test taps are located on the valve.

Automatic valve: The taps are located in the front. The supply pressure is marked '**IN**' and the manifold pressure is marked '**OUT**'. There is also an arrow marking the direction of gas flow.

- Loosen the set screw inside the tap with a 1/8" wide flat screw driver.
- Connect a 1/4" rubber tube to the tap and to the manometer.
- Be sure to tighten the set screw inside the tap after you are finish taking pressure readings.
- Check for leaks.

CHECKING AND ADJUSTING PILOT

The pilot flame should have the characteristic as shown in the illustration below. The flame should not have yellow tips but should engulf the thermocouple and thermopile. It can be adjusted by turning the screw marked "pilot" on the control valve.



SERVICING Cont...**CONVERTIBLE PILOT ORIFICE**

Pilot
burner
head



The pilot assembly is convertible to the type of gas being used, simply unscrew the body (using a 1/2" wrench) 1/2 a turn open then push the small metal tab across to the other side of the body and retighten.

1/2" WRENCH (HERE)

SHOULD YOUR GLASS BREAK

In the event your glass cracks or breaks, it must be replaced by the exact same size and material. It is made from high temperature clear TEMPERED material. See replacement parts list and contact your nearest Archgard dealer. Refer to page 15 for removal details.

- Remove old door and carefully discard the broken parts (the old door parts are not field serviceable).
- Replace with a new Factory assembled door assembly (part number 827-0041). This new door assembly will simply "clip" onto the body of the appliance (as the old door did) no tools are required to complete this operation.
- Do not substitute any components or materials on this door assembly.
- Replace the door (carefully making sure all three latches are closed).

REPLACING OPTIONAL CONVECTION BLOWER

- Mark all wires to be removed for proper reassembly. **CAUTION:** Wiring errors cause improper and dangerous operation.
- The convection blower is located at the bottom of the appliance at the back. Remove the three screws holding the blower.
- Lift the blower out and disconnect the wires from the blower.
- Replace in reverse order.

REPLACEMENT PARTS FOR DVTE-42

ITEM #	DESCRIPTION	QTY	UNIT
200-0102	OWNERS MANUAL, NORTHFIRE 42-E	1	EA
300-0031	MAGNET 0.25 X 0.875 X 1.0 (7 Lb PULL)	2	EA
300-0034	LATCH, DOOR 1 11/16" X 1 3/16"	3	EA
301-0070	ORIFICE CAP #42 (NATURAL GAS)	1	EA
301-0039	ORIFICE CAP #52 (PROPANE GAS)	1	EA
<u>305-0013</u>	<u>SPEED CONTROL (KBMS-13BV) c/w KNOB</u>	1	EA
<u>305-0015</u>	<u>ELECTRIC FAN - CROSSFLOW (120VAC)</u>	1	EA
<u>305-0021</u>	<u>FAN THERMODISC (110 deg F)</u>	1	EA
827-0041	REPLACEMENT DOOR ASSEMBLY (TEMPERED GLASS 6mm CLR)	1	EA
308-0099	HONEYWELL GAS CONTROL VALVE ON/OFF (CONVERTIBLE)	1	EA
308-0093	"P S E" PILOT ASSEMBLY (CONVERTIBLE)	1	EA
310-0009	COALS, MEDIUM GRADE 40z BAG	2	EA
310-0046	MINERAL WOOL, (EMBERS)	1	EA
310-0016	CERAMIC FIBER LOG (REAR LEFT)	1	EA
310-0015	CERAMIC FIBER LOG (REAR RIGHT)	1	EA
310-0067	CERAMIC FIBER LOG (FRONT LEFT)	1	EA
310-0013	CERAMIC FIBER LOG (FRONT RIGHT)	1	EA
310-0069	CERAMIC FIBER LOG (FRONT CENTER)	1	EA
<u>311-0037</u>	<u>BRICK PANEL (REAR)</u>	1	EA
<u>311-0056</u>	<u>BRICK PANEL (LEFT)</u>	1	EA
<u>311-0056</u>	<u>BRICK PANEL (RIGHT)</u>	1	EA
314-0101	GASKET (RELIEF PLATE) 3 1/2 X 15	2	EA
314-0115	GASKET (VENTURI / BURNER)	1	EA
<u>xxx-xxxx</u>	<u>PARTS UNDERLINED ARE OPTIONAL KITS (THAT MAY BE INSTALLED)</u>		

Parts can be ordered through your local dealer or distributor by giving ITEM # and DESCRIPTION.



ARCHGARD LIMITED WARRANTY

This Limited Warranty is made by ARCHGARD INDUSTRIES LTD. hereinafter referred to as "Archgard". Archgard warrants to the original consumer that the gas burning fireplaces will be free from defects in materials and workmanship under normal use and service, for a lifetime.

INCLUSIONS:

- Combustion chamber, burner pans & burner tubes, log sets (including embers) and all gold plating.
- Electrical components and gas valves are covered under the warranty for a period of 1 year from purchase.

EXCLUSIONS:

- Paint, glass, trim, gasket, brick panels, parts which have been tampered with or modified in any way.
- Negligence, misuse, accidental damage.
- Special environmental conditions, which may cause spillage or downdraft conditions due to negative room air pressure, geographical location, inadequate ventilation or excessive offsets.

WHAT TO DO IN THE EVENT OF A PROBLEM:

- Thoroughly read your manual.
- If you cannot solve the problem yourself contact your Archgard dealer or representative.
- When calling for help have the following information available:

Model Name	Serial Number	
Place of Purchase	Date of Purchase	Problem Description

NOTE: Warranty may be void if work is carried out by unqualified personnel. Only original Archgard parts may be used. Please consult your Archgard representative if in doubt.

OBTAINING WARRANTY SERVICE:

To obtain warranty service, the consumer shall return the defective part to the original selling dealer transportation prepaid, along with the serial number of the appliance and proof of purchase. Any defective part, in our judgment, will be repaired or replaced at Archgard's discretion. The dealer must obtain approval from an authorized Archgard representative before any repairs are made.

WARRANTY LIMITATION:

THIS LIMITED WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED AS TO QUALITY, MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

The appliance is only warranted for the use as intended by the installation and operating instructions and local building codes. The warranty will not cover damage due to accident, misuse, abuse, alteration or improper installation.

This limited warranty is void unless the appliance is installed by a qualified installer, in accordance with the instructions furnished with the appliance. Some Provinces or States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to the consumer.

Any damages resulting from defects in this product, is limited to replacement of defective parts and does not include incidental and consequential expenses sustained in connection with the product. This warranty is limited to residential use only and gives the consumer specific rights. These rights may vary from State to State or Province to Province.

17 May 2001

Postage

WARRANTY REGISTRATION

**ARCHGARD INDUSTRIES LTD.
7116 BEATTY DRIVE
MISSION, B.C. CANADA
V2V 6B4**

FOLD DOWN AT LINE

fire-parts.com

FOLD DOWN AT LINE & TAPE CLOSED

Model No: _____ Serial No: _____ Date Installed: ____/____/____

Name & Address: _____

Telephone: (_____) _____ - _____

Dealer's Name & Address: _____

Installer's Name & Address: _____

Why did you choose this product? _____

Thank you for purchasing our product and filling out this warranty card.