

OWNER'S MANUAL

With Installation and Operation
Instructions for

STERLING GAS-FIRED DIRECT VENT ROOM HEATER

Warrnack Hersey



CERTIFIED

Manufactured by

HearthStone®/NHC, Inc.
Stafford Avenue, P.O. Box 1069
Morrisville, Vermont 05661
Telephone 1-802-888-5232

FOR YOUR SAFETY

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

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause personal injury or property damage. For assistance or additional information, refer to details in this manual, consult qualified service personnel or the gas supplier. Your warranty is voided, and NHC, Inc. will accept no responsibility for units that have been modified, tampered with or have been installed or used improperly or contrary to this manual. Use of any components not supplied by NHC, Inc. will void your warranty.

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 the 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.

INFORMATION SHEET

Record here all relevant information concerning the purchase and installation of your Sterling gas-fired heater. This information will facilitate servicing, purchase of replacement parts and warranty claims, if necessary. Keep your original receipt in a safe place as proof of purchase.

Serial Number: _____

Fuel type (check one): _____ Natural Gas
_____ Liquid Propane

Sold by: _____

Phone: _____ Date of Purchase: _____

Installed by: _____

Phone: _____ Date of Installation: _____

Gas Supplier _____

Phone: _____

Read this entire Owner's Manual before installing or operating the Sterling gas fired heater. Retain this manual for future reference.

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INTRODUCTION

Congratulations on your purchase of a HearthStone® Sterling™ gas-fired direct-vent heater. The Sterling incorporates the latest in energy efficient gas technology which will provide you with clean, efficient heat for years to come. The combination of natural stones with cast iron gives the Sterling a pleasing look which can be maintained with minimum care.

If there are any questions regarding installation or operation which are not answered within this Owner's Manual, contact your local dealer or your building inspector.

Your Sterling is equipped with a standing pilot light which: 1) generates a millivoltage that powers the wall-mounted thermostat and 2) lights the main burner when the thermostat calls for heat. The standing pilot light/millivolt Sterling requires no external power source for normal operation (unless equipped with the optional blower fan kit).

Sterling gas heaters can burn either natural gas or liquid propane gas (LP). If the type of gas your Sterling is equipped for does not accommodate your needs, it can be converted to the proper type by qualified service personnel using an optional conversion kit prior to operating the unit.

This unit is equipped with a variable output control located on the gas control valve. It allows you to vary the heat output, along with the flame height, to suit particular needs. Heat output can be reduced during Fall and Spring (when the need for heat is reduced) and increased during Winter months (when the need for heat is greatest). Regardless of how you set the variable output control, the on/off cycling of the unit is always controlled by the wall-mounted thermostat.

This unit is equipped with variable speed fans. The speed control is located on the front of the stove at the lower right side. This allows you to turn the fans on or off and control the speed of the fans to suit your needs. Regardless of the speed at which the fan is set at, the fan will automatically come on when the unit heats up and shuts off once the unit has cooled down.

The Sterling will provide you with years of practical and convenient service. However, as with any gas appliance, the unit must be properly and safely installed and maintained by qualified service personnel to ensure safe and trouble-free operation. Do not attempt to install, service or maintain this unit unless qualified to install, service or maintain gas-fired, vented appliances.

SPECIFICATIONS

	<u>Natural Gas</u>	<u>LP</u>
INPUT RATING (Btu/hr) 0-610m	36,400	35,300
INPUT RATING (Btu/hr) 610-1370m	34,800	33,600
ORIFICE SIZE (DMS) 0-610m	#33	#51
MANIFOLD PRESSURE (in.w.c./kPa)	3.5 / 0.87	10.0 / 2.49
MANIFOLD PRESSURE-LO SETTING (in.w.c./kPa)	1.7 / 0.42	6.4 / 1.59
MINIMUM INLET PRESSURE (in.w.c./kPa)	4.5 / 1.12	11.0 / 2.74
MINIMUM INPUT (Btu/hr) 0-610m	25,000	28,000
MAXIMUM OUTPUT (Btu/hr) 0-610m	28,000	28,000
MAXIMUM INLET PRESSURE (in.w.c./kPa)	10.5 / 2.61	13.5 / 3.36
NOMINAL EFFICIENCY WITH A FAN	77%	80%
INITIAL SHUTTER ADJUSTMENT	HALF CLOSED	OPEN

Fuel requirements	Natural Gas OR Liquid Propane (LPG)
Fuel supply line size	1/2"
Ignition	Standing pilot light
Certification	TESTED TO: ANSI Z21.11.1-1991 "Gas Fired Vented Room Heaters" ANSI Z21.44-1991 "Gas Fired Gravity and Fan Type Direct Vent Wall Vent Furnaces"; UL307B "Gas Burning Heating Appliances for Mobil Homes & Recreational Vehicles"; CAN 1-2.1-M89 "Gas Fired Vented Room Heaters" CGA I.R. #41-1991 "Direct Vent Gas Fireplaces"; Can/CGA-2.17-M91 "Gas Fired Appliances for use at High Altitudes"
Installation	This appliance must be installed in accordance with the manufacturer's instructions, the Manufactured Home Construction and Safety Standard, Title 24 CFP, Part 3280, and local codes, if any; if not, follow ANSI Z223.1-1992 (U.S.Installation) or Current CAN 1-B149 Installation Code (Canadian Installation)
Warranty	1 year limited warranty, excluding door glass, gasket and enamel finish

Refer to Appendix B - Safety Label for Canadian ratings and orifice sizes for high altitude installations.

C.G.A./A.G.A. ANSI APPROVAL

Gas appliances must be tested and certified by a nationally recognized testing and certification laboratory to ANSI (American National Standards Institute) gas appliance safety standards in the U.S.A./ and to Canadian Gas Association Standards in Canada. NHC, Inc. Hearthstone Sterling gas units have met all necessary standards.

There are a number of nationally recognized testing and certification agencies throughout the United States and Canada. Among them are Warnock Hersey, A.G.A. Laboratories, C.G.A. Laboratories, Omni Laboratories, etc. NHC, Inc. Hearthstone Sterling gas units have been tested and certified by Inchcape Testing Services, Warnock Hersey INC., 8431 Murphy Dr., Middleton, WI 53562.

Check with local building code officials prior to installing to ensure compliance with local codes and procedures. In the absence of local codes, units must be installed in accordance to National Fuel Gas Code Z223.1.

WARNINGS - CAUTIONS - SAFETY INFORMATION

MUST BE INSTALLED AND MAINTAINED BY QUALIFIED SERVICE PERSONNEL

Failure to properly install, adjust, and maintain this gas heater may result in an unsafe or hazardous condition which may lead to carbon monoxide poisoning, fire explosion, personal injury and loss of life.

READ THIS OWNER'S MANUAL

Operate and maintain this gas heater according to instructions in this owner's manual. Read this manual in its entirety. The gas heater must be inspected before use and at least annually by qualified service personnel.

DO NOT OPERATE IF ANY PART HAS BEEN UNDER WATER

Immediately call qualified service personnel to inspect the gas heater and to replace any part of the control system and any gas control which has been under water.

! HOT SURFACES !

Certain exposed surfaces of the Sterling will reach high temperatures during normal operation. Do not place objects that may obstruct air circulation on, under or near this gas heater. Clearances to combustibles must be maintained as specified elsewhere in this manual. Clean the area around, under and behind the unit on a regular basis to prevent the accumulation of dust and lint.

Children and adults who are unfamiliar with heaters of this type should be alerted to the hazards of high surface temperatures and warned that they should stay away to avoid burns to skin and clothing. Children should be carefully supervised when in the same area as the Sterling gas heater. Do not leave children unattended in the vicinity of this unit.

! FIRE HAZARD !

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this gas heater. The Sterling should be located out of traffic and away from furniture, draperies, clothing, and flammable material.

NEVER BURN PAPER, WOOD, OR OTHER MATERIALS

This gas heater is designed to burn either natural gas or liquid propane (LP). Never burn any fuel which was not intended for use.

! ELECTRICAL HAZARD !

The Sterling, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 in the U.S. or CSA C2.2.1 Canadian Electrical Code in Canada.

The Sterling is equipped with two blower fans. The three-prong grounded plug on the blower must be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from the plug or otherwise attempt to circumvent the grounding protection provided with the gas heater.

MUST BE VENTED TO THE OUTSIDE

Never vent the gas heater to other rooms or buildings. Do not burn gas heater with the viewing door open. Do not burn gas heater with broken glass. Only open front door for routine service. Do not slam door or strike glass.

DO NOT LIGHT PILOT OR MAIN BURNERS BY HAND

The standing pilot light equipped with this gas heater is lit by using a piezoelectric spark generator as described elsewhere in this manual. Never attempt to light the pilot light or main burners by hand with a match or lighter. If, after repeated attempts, the pilot light fails to light, discontinue operation, turn off the gas at the Sterling gas control valve and contact qualified service personnel for assistance.

CERAMIC FIBER LOG SAFETY INFORMATION

If the decorative ceramic fiber logs and special rock wool material supplied with the Sterling are damaged or missing, they must be replaced with the same, approved replacements supplied by the manufacturer-supplier. Do not replace the ceramic fiber logs or rock wool with unapproved ceramic logs, real wood logs or any other material.

SERVICE CAUTION

Any shield, door, safety screen or component removed for servicing the Sterling must be replaced prior to operating. If you believe your Sterling is not performing properly in any way what so ever, immediately discontinue operation until the unit has been inspected and approved for continued operation by qualified service personnel. Always shut off gas & electricity to the stove while servicing. Make sure unit is completely turned off. Make sure the unit is not hot when servicing or cleaning. Use of any components not supplied by N.H.C., Inc. on the stove or vent system voids all warranties. Do not use substitute components.

WHAT TO DO IF YOU SMELL GAS

- ✓ DO NOT ATTEMPT TO LIGHT THIS GAS HEATER OR ANY APPLIANCE
 - ✓ EXTINGUISH ANY OPEN FLAME
 - ✓ DO NOT TOUCH ANY ELECTRICAL SWITCH
 - ✓ DO NOT PLUG IN OR UNPLUG ANY APPLIANCE
 - ✓ DO NOT USE ANY PHONE IN YOUR BUILDING
 - ✓ OPEN WINDOWS TO VENT THE ROOM AND VACATE THE BUILDING
 - ✓ TURN OFF THE MAIN GAS SUPPLY
 - ✓ IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOR'S PHONE
 - ✓ IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT
-

UNPACKING AND INSPECTION

PACKING LIST

- 1 - Sterling Gas-fired Heater
- 1 - Decorative Ceramic Fiber Logs
- 1 - Owner's Manual
- 1 - Warranty Card
- 1 - Bag Rock Wool
- 1 - Thermostat with 20' Thermostat Wire

NOTE: Vent kits are supplied separately. Failure to use vent kits supplied by NHC, Inc. will void your warranty.

UNPACK AND INSPECT FOR DAMAGE

The Sterling is packaged by the manufacturer to withstand shipment without damage under most circumstances. However, damage can occur during transit and handling, so take care to inspect for damage when unpacking and installing the unit. If any damage or missing parts are detected, immediately contact your dealer. Do not install or put into service a damaged or incomplete heater.

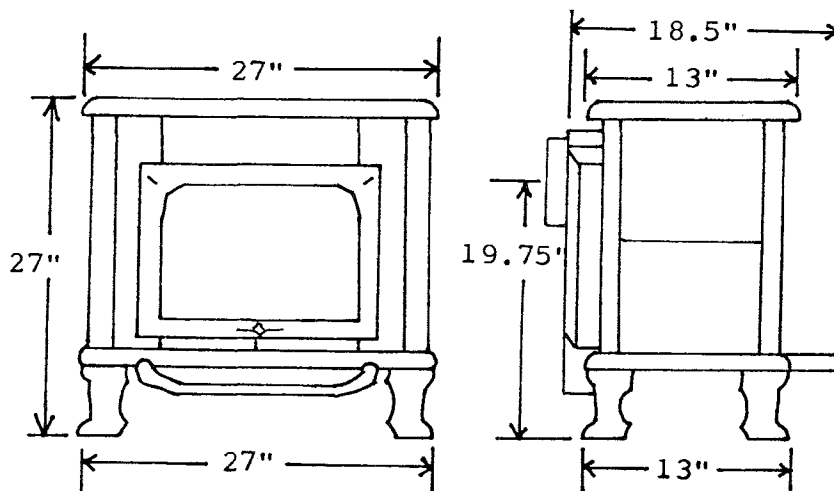
Prior to removing the shipping carton, inspect the carton for visible signs of damage. Carefully remove the shipping carton. Caution: The three top stones are NOT cemented or otherwise permanently fastened in place! Carefully remove and set aside the three top stones. Use the protective wrapping material to temporarily protect the stones from chipping and damage while the unit is inspected and installed.

Inspect the Sterling for visible or concealed damage. The unit should appear square and true. The stones should be whole and without cracks, chips or breakage. The sheet metal parts should be smooth and free of bends or dents. The enameled cast iron (if porcelainized) should be free of chips or cracks. If visible or concealed damage is found or suspected, contact your dealer for instructions.

With the top stones removed and set aside, undo the lag bolts which fasten the unit to the pallet. Take care not to mar or chip the enamelled legs on porcelainized units. Lift the stove off the pallet and set it into place.

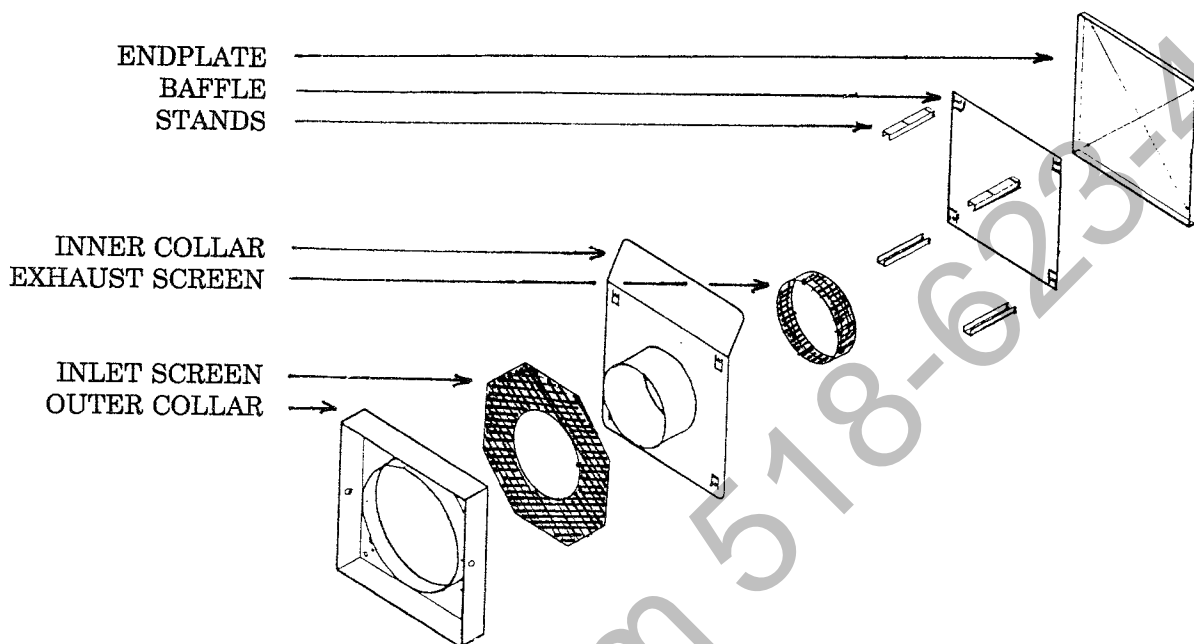
The decorative ceramic fiber logs supplied with the Sterling are contained within the firebox. Always use great care when handling the decorative ceramic fiber logs as they are fragile and subject to damage or breakage if handled roughly. Open the firebox and inspect the logs for breakage. If a broken or damaged log is encountered, contact your dealer for replacement logs. Otherwise, set the logs aside until called for in the installation procedure.

DIMENSIONS

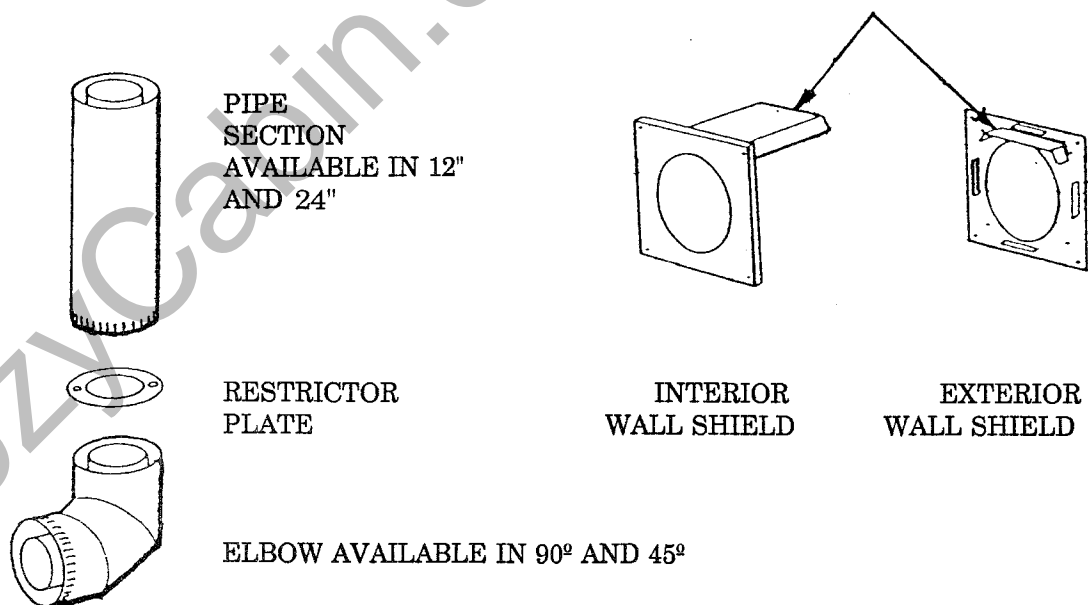


VENTING COMPONENTS

END CAP SECTIONS:



TOP RADIATION SHIELDS:



FLOOR PROTECTION

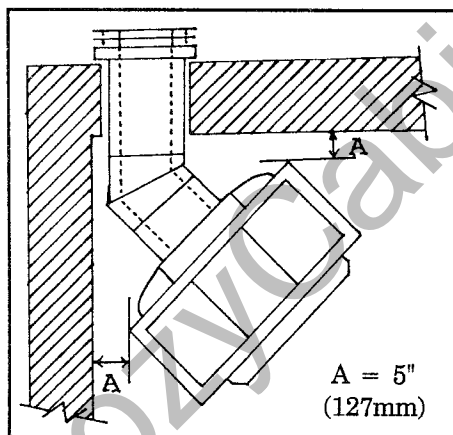
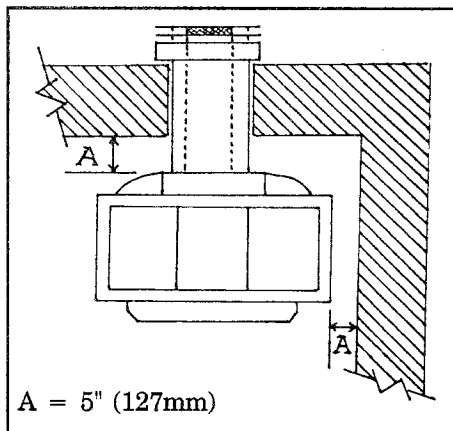
The Sterling must be installed on a non-combustible surface with a non-combustible hearth protection which extends 16" beyond the front of the stove. For installation of the Sterling on carpeting, vinyl tile or other combustible material, the unit shall be installed on a metal, stone, tile, or other non-combustible hearth. The hearth must extend the full width and depth of the Sterling, plus the 16" extension in front of the stove, with a minimum hearth dimension of 36" x 27" (585 X 686 mm).

CLEARANCES TO COMBUSTIBLES

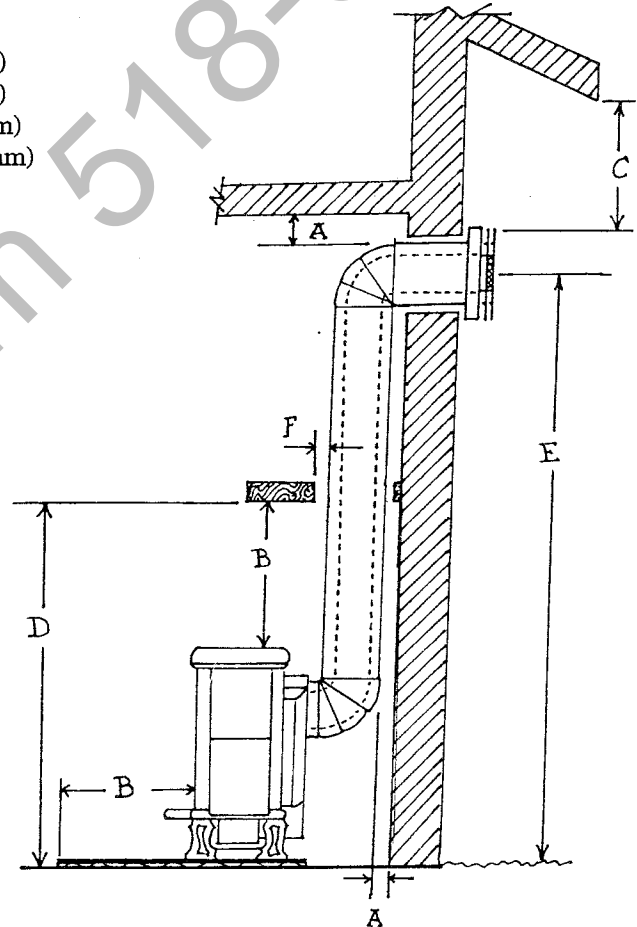
Due to high surface temperatures, the Sterling should be located out of traffic and away from furniture and draperies. Clothing and other flammable material should not be placed on or near the Sterling heater.

When positioning the unit be sure to consider the need for access to the gas control valve access door on the lower right side of the unit as well as full access for periodic cleaning and servicing. Clearances shown below allow adequate accessibility for servicing.

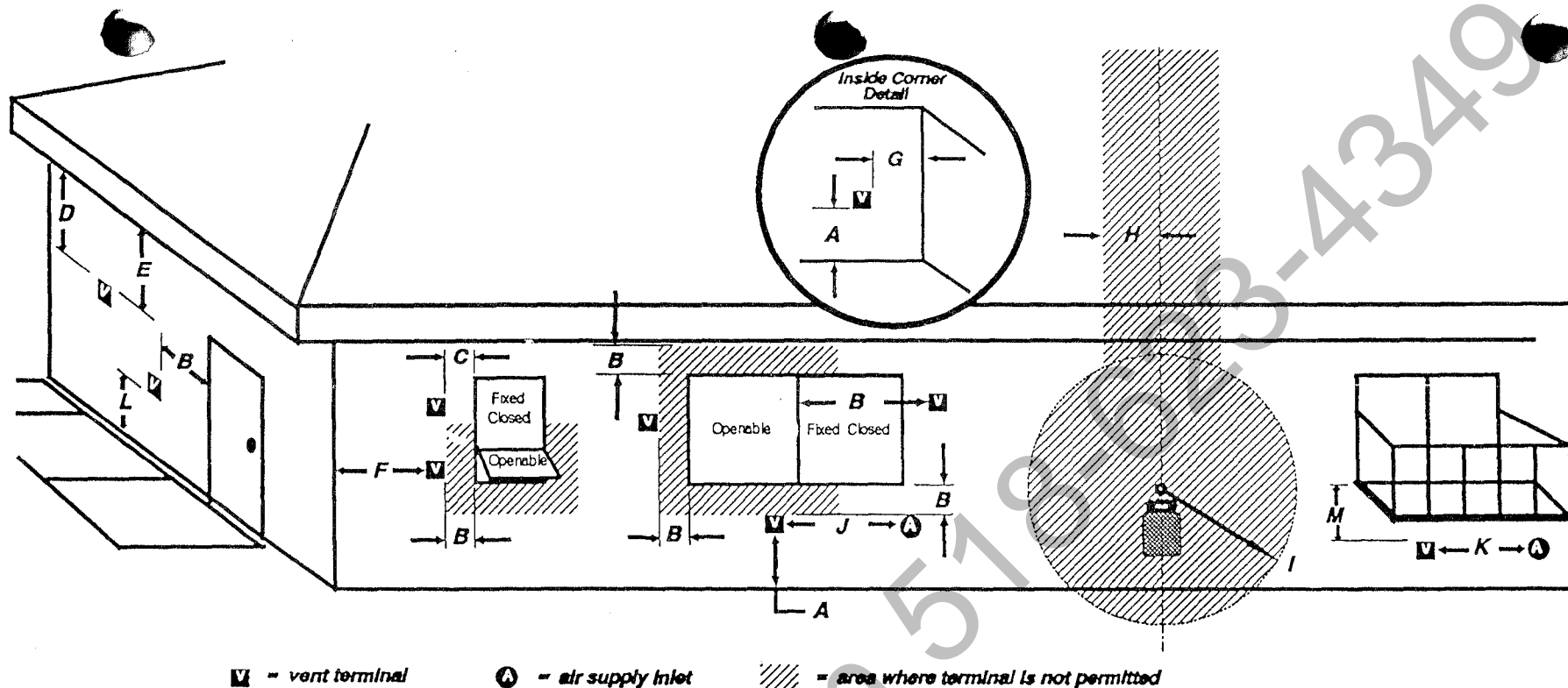
Minimum clearances to combustibles must be maintained as shown below.



- A = 2" (51mm)
- B = 16" (407mm)
- C = 18" (458mm)
- D = 43" (1093mm)
- E = 120" (3050mm)
- F = 1" (26mm)



NOTE: Minimum floor protection must be the same as the stove (27").



EXTERIOR TERMINATION CLEARANCES

- A =** clearance above grade, veranda, porch, deck, or balcony
[* 12 inches (30 cm) minimum]
- B =** clearance to window or door that may be opened
[* 12 inches (30 cm) minimum for appliances ≤ 100 000 Btuh (30 kW)
36 inches (90 cm) minimum for appliances > 100 000 Btuh (30 kW)]
- C =** clearance to permanently closed window [minimum 12 inches (30 cm) recommended to prevent condensation on window]
- D =** vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the centre-line of the terminal [18 inches (46 cm) minimum]
- E =** clearance to unventilated soffit [12 inches (30 cm) minimum]
- F =** clearance to outside corner
- G =** clearance to inside corner

- H =** * not to be installed above a meter/regulator assembly within 3 feet (90 cm) horizontally from the centre-line of the regulator
- I =** clearance to service regulator vent outlet [* 6 feet (1.8 m) minimum]
- J =** clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance
[* 12 inches (30 cm) minimum for appliances ≤ 100 000 Btuh (30 kW)
36 inches (90 cm) minimum for appliances > 100 000 Btuh (30 kW)]
- K =** clearance to a mechanical air supply inlet [* 6 feet (1.8 m) minimum]
- L =** † clearance above paved side-walk or a paved driveway located on public property [* 7 feet (2.1 m) minimum]
- M =** clearance under veranda, porch, deck, or balcony [* 12 inches (30 cm) minimum ‡]

† a vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings *

‡ only permitted if veranda, porch, deck, or balcony, is fully open on a minimum of 2 sides beneath the floor *

* as specified in CGA B149 Installation Codes (1991) Note: local Codes or Regulations may require different clearances

TERMINATION SPECIFICATIONS

Minimum combustible clearances to the vent on a horizontal run are 2" on top and 2" on the bottom and sides.

Maximum horizontal run allowed for venting is 10 feet from the stovepipe connection.

Maximum vertical rise allowed is 12 feet. Restrictor plates can be used on vertical only runs with a restrictor plate in every 2 foot pipe section.

Horizontal run of vent must have a 1/4" per foot rise towards the termination for LP gas and a 1/2" per foot rise for natural gas.

Never let the vent run downward; this could cause high temperatures and may present the possibility of a fire.

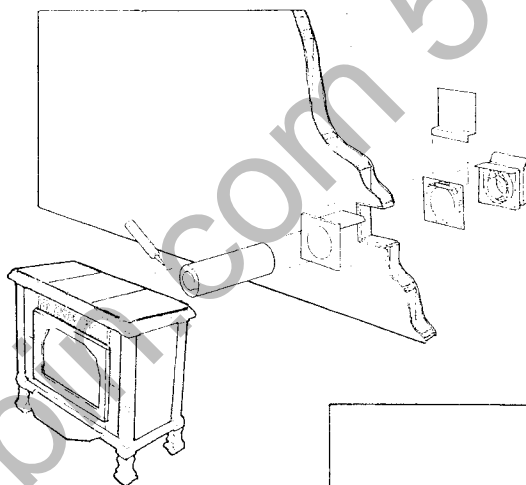
Elbows cannot be enclosed in a wall, floor, or ceiling.

Do not pack air spaces with insulation or other material.

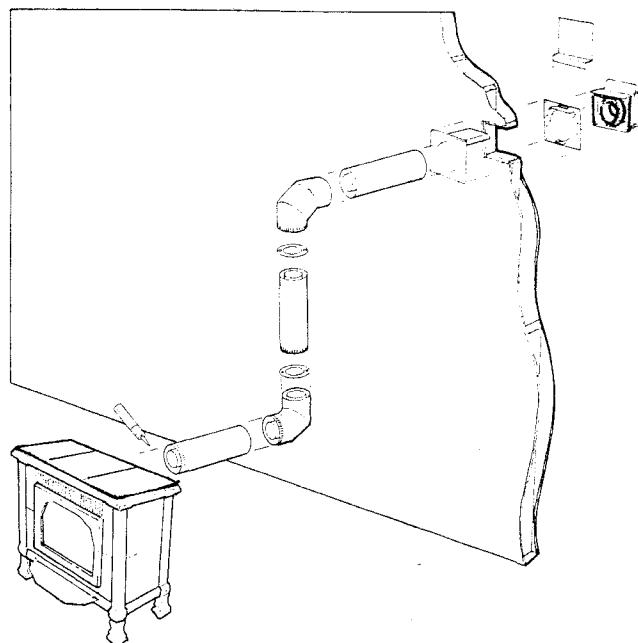
Due to the many different combinations that can be used when constructing venting, the number of chimney sections required can only be determined by the installer.

INSTALLATION BREAK-DOWNS

Straight-back installation:

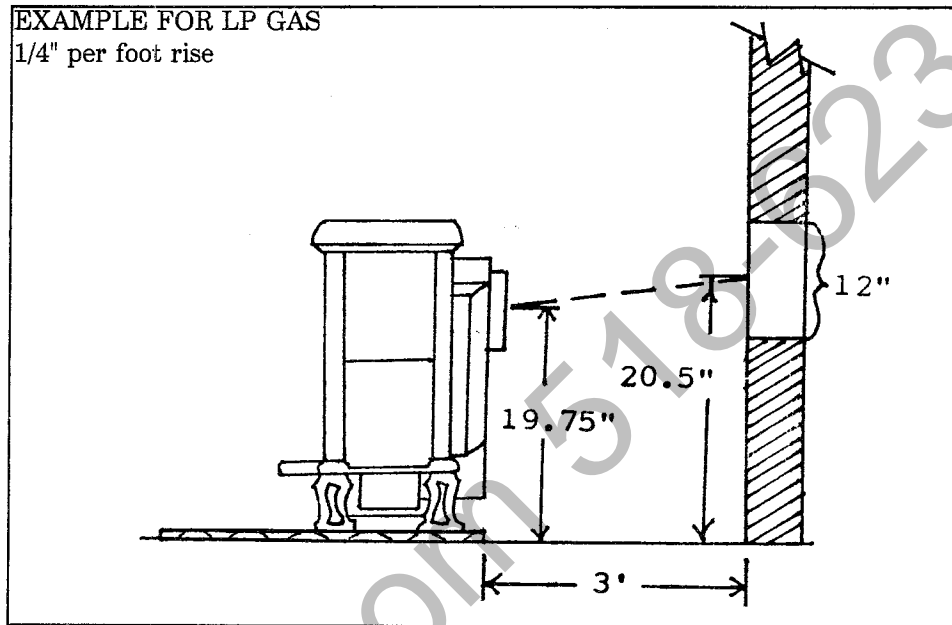


Up-and-out installation:



POSITIONING YOUR STOVE

- 1) Place stove in desired location. Maintain clearance from combustibles.
- 2) Determine the vent configuration. Due to the many different combinations that can be used when construction venting, the number of chimney sections required can only be determined by the installer.
- 3) Find the area of wall penetration. The hole must be positioned so that the vent will have a $1/4"$ per foot rise toward the termination for LP gas or $1/2"$ per foot rise for natural gas. Refer to the following diagram for an example of how this is done.
- 4) Be sure there is no wiring or plumbing in the chosen location. The hole location must meet all local and national codes and cannot be easily blocked or obstructed i.e. snow drifts.



NOTE: For natural gas ($1/2"$ per foot rise), exit center line is 19.75" and wall penetration center line is 21.25" if the stove is 3 feet from the wall.

WALL PENETRATION

- 1) Mark the hole 12" square and cut through the wall.
- 2) Pass-through will be perpendicular to the wall and have a $1/4"$ (LP) or $1/2"$ (NAT) per foot rise towards the termination.
- 3) Frame the hole.
- 4) Measure thickness of the wall, and cut the top radiation shield on the interior wall shield to that thickness. Note the radiation shield should terminate flush with the outside wall.
- 5) Secure the wall shield into position with 4 fasteners. The spacer tabs on the shield should fit into the frame neatly.

CONNECTING THE PIPE

- 1) Apply a bead of high temperature sealant around the outside of the crimped end of the first section of 5" pipe.
- 2) Connect the pipe to the 5" pipe end on the stove.
- 3) Apply a bead of high temperature sealant around the outside of the connection. Smooth the sealant out to make an air tight seal.

- 4) Connect the first section of 8" pipe to the pipe end on the stove by following the same procedure outlined in steps 1-3.
- 5) Continue to connect the remainder of the pipe sections by following the same procedure as connecting the first pipe sections as outlined in steps 1-4. Be sure to use restrictor plates on vertical sections.
- 6) The last section of vent may require cutting, depending upon wall thickness and heater location. The end of the vent must penetrate the exterior wall. Cut the pipe so the 8" pipe section extends past the exterior wall finish 2 1/2" and the 5" pipe section extends past the exterior wall finish by 2 1/2".

END CAP INSTALLATION

- 1) Exterior wall shield is sealed to the exterior of the building. Be sure the spacers on the shield fit neatly to the framing in the wall. Note that when you have lap siding, you have to shim or caulk to make a positive seal.
- 2) The short, top radiation shield section on the exterior wall shield fits under the top radiation shield of the interior wall shield to make a complete connection.
- 3) Apply silicone to the inside rim of the first end cap section, and connect it to the last section of pipe. Seal in the same way as other pipe sections.
- 4) Screw the first end cap section to the exterior wall shield.
- 5) Screw the flat screen piece to the first end cap section.
- 6) Connect the second 5" end cap section to the 5" pipe end and seal. Be sure the deflector flange is on the top.
- 7) Install the 4 end cap legs to each corner of the second end cap section.
- 8) Place the round screen piece around the outside of the 5" flange on the second end cap section.
- 9) Slide the third end cap section onto the 4 legs.
- 10) The last section is attached with 4 long screws which extend along the legs to the first end cap section.

ELECTRICAL CONNECTIONS

Thermostat

The Sterling requires a wall-mounted thermostat for operation. The thermostat controls the unit by "calling for heat" and turning the unit on when the room is cold, and turning the unit off once the room has warmed sufficiently.

The Sterling thermostat is controlled by a 750 millivolt DC two-wire circuit. Both the thermostat and 20 feet of 18 gauge thermostat wire are included with the Sterling as standard equipment.

NOTE: An inherent problem with millivolt systems is room over-heating. It is advisable to turn the thermostat to a temperature lower than the temperature you would like to maintain the room at.

Thermostat Placement

The thermostat should be placed in the same room or living space as the Sterling, typically 5' (1.5 m) off the floor and away from influences which would cause the temperature in the vicinity of the thermostat to be unrepresentative of the room temperature in general. Such influences might include strong lighting, a heater vent from the central heating system, a nearby drafty window, etc.

Placement of the thermostat on an inside wall rather than an outside wall is generally preferable. Do not place the thermostat directly behind or too near the Sterling, otherwise heat from the unit will immediately satisfy the thermostat and turn the unit off.

Thermostat Wiring

The thermostat should be connected to the Sterling using no more than 20' (6 m) of 18 gauge insulated thermostat wire. The thermostat wire from the Sterling to the thermostat can be surface mounted or routed under the floor, through walls, etc.

If 20' (6 m) of wire is not long enough, 16 gauge wire may be used in its place but must not exceed 40' (12 m) in length. In either case, be sure to leave a small coil of wire behind the Sterling so that the unit can be moved out of position for servicing and cleaning.

Connect the two conductor thermostat wires to the gas control valve on the top and bottom screws marked **TH**. When making these connections, position the thermostat wire so that it extends towards the wall behind the Sterling, then towards the thermostat.

At the thermostat, the thermostat wire should be connected to the two connection screws on the thermostat base plate per the instructions received with the thermostat. Take care not to over-tighten the connection screws and not to damage the internal parts of the thermostat. The thermostat should be mounted level for proper operation and accurate temperature control.

GAS SUPPLY

Factory-Ready for Gas Operation

All Sterlings are shipped from the manufacturer fully assembled and ready for natural gas or LP (liquid propane) gas operation with minor adjustment. However, if the Sterling needs to be converted from natural gas to LP or from LP to natural gas, conversion of the unit must be performed by qualified service personnel using the manufacturer-supplied optional conversion kit. Follow the conversion instructions supplied with the conversion kit.

Gas Connection

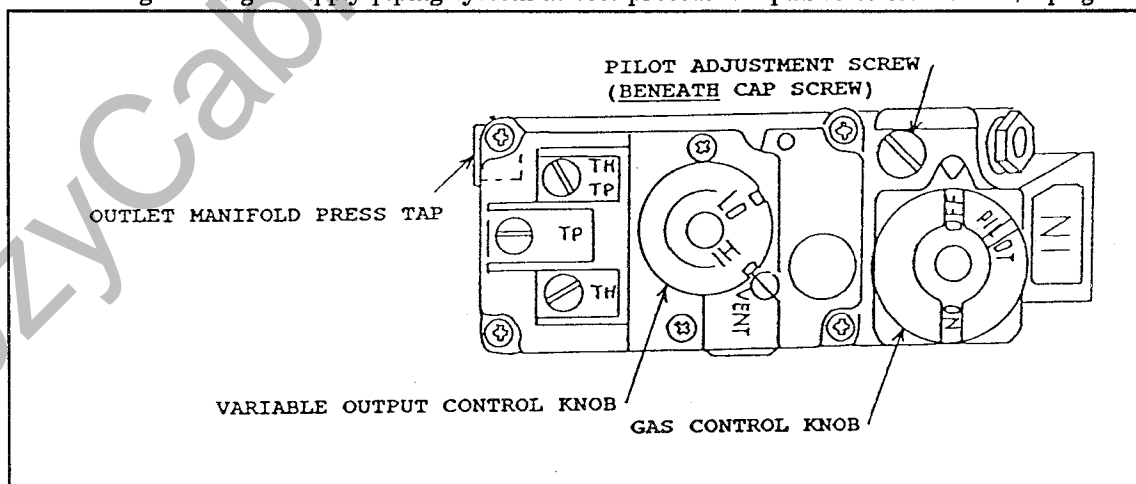
The gas supply line connection is made to the Sterling's gas control valve just inside the right rear leg of the unit using a 3/8" male NPT fitting. The supply line should be 1/2" diameter or appropriately sized to provide a sufficient gas supply to meet the maximum demand of the unit without undue loss of pressure.

This appliance must be installed in accordance with the manufacturer's instructions, the Manufactured Home Construction and Safety Standard, Title 24 CFP, Part 3280, and local codes, if any; if not, follow ANSI Z223.1-1992 (U.S. installation) or current CAN 1-B149 Installation Code (Canadian installation). The supply line must include a manual shut-off valve and union so that the unit can be disconnected for servicing. Provide a 1/8" NPT plugged tap, accessible for test gauge connection, immediately upstream of the gas supply connection to the unit.

Gas Pressure Adjustment

Once connected to the gas supply, the supply line and manifold gas pressures must be tested to ensure that they meet the gas supply pressures for the type of fuel in use for the purpose of input adjustment. Natural gas: 4.5" w.c. min., 10.5" w.c. max. LP: 11.0" w.c. min., 13.5" w.c. max. The supply line pressure is tested by connecting a manometer to the supply line and adjusting the incoming pressure if necessary to meet the required supply line pressure as listed in the Specifications. The manifold pressure is tested by connecting the manometer to the manifold pressure tap on the gas control valve (Figure 7).

This 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. The Sterling 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.



LOG PLACEMENT WITHIN UNIT

Before placing the log set on the burner tube, be sure the screen supplied with the stove is placed on the burner tube. It is bent to a 90° angle. One side of the screen slides between the front of the stove and the burner tube. The other side rests on the burner tube. The side with the slots cut out is on top of the burner tube (Figure 1).

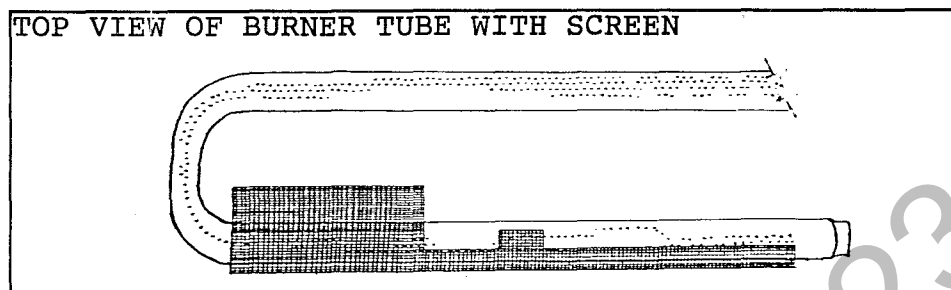


FIGURE 1

The log set must be placed in the firebox at its precise location. There are four white tabs attached to the log set to aid in correct placement. All tabs are located on the under side of the log set. Figure 2 shows a top view of the log set and the precise location and identification of each tab.

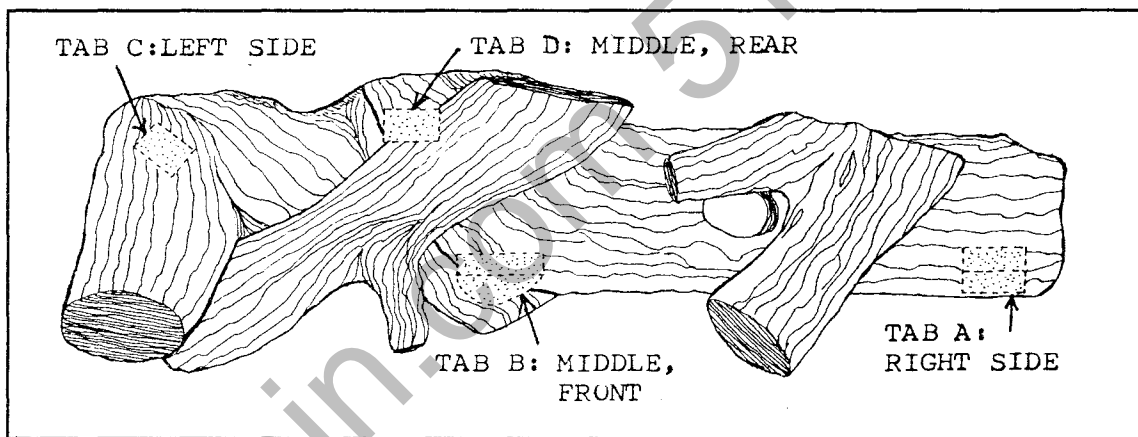


FIGURE 2

Since the two tabs located towards the rear of the log set are difficult to see, it is easiest to correctly align the log set by noting the correct positioning of Tabs A and B, the two front tabs. Note that these tabs have a notch cut into them. Set the log set on the burner tube with the notches setting on the tube. See Figure 3.

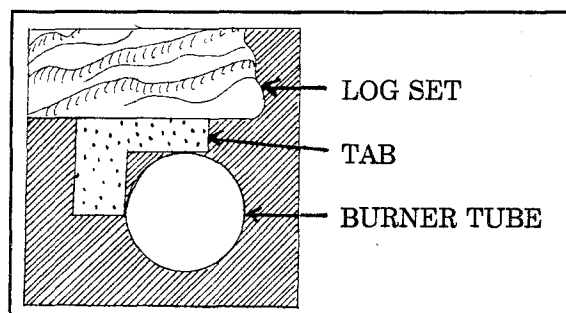


FIGURE 3

The exact placement of Tab #B, the middle, front tab, is critical as it sits on the burner tube in an area without holes. The holes surrounding the tab will be within 1/8" (3 mm) of the tab. Do not cover any holes with the tab, and don't set the tab more than 1/8" (3 mm) away from the holes to the right of the tab.

Tab D, the middle, rear tab, is strategically located to keep the log set from moving too far back onto the rear of the burner tube. This tab ultimately rests against the burner tube as seen in Figure 4. Tab C, the far left side tab, serves to prevent the log set from moving too far to the left. Figure 4 shows the top view of the log set outline as it sits on the burner tube.

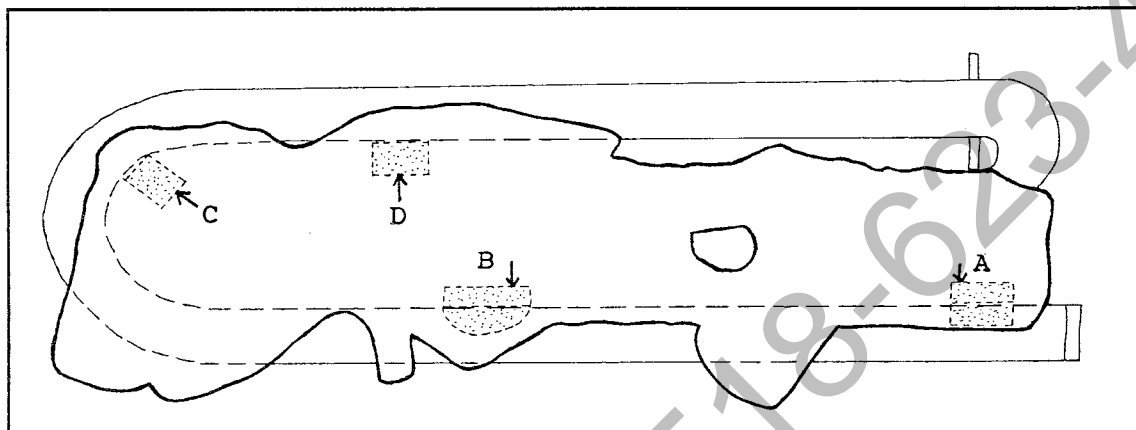


FIGURE 4

Only the decorative ceramic fiber log set supplied with the unit should be placed in the firebox. Do not place other ceramic logs, real wood logs or other material in the firebox. If the log set is damaged or broken contact your dealer or the manufacturer for a replacement.

If the log set does not set into the firebox exactly as outlined above, contact our customer service department for assistance. Exact positioning of the log set is required in order to obtain a pleasing flame pattern and efficient combustion. Incorrect log placement may cause carbon build-up, excess thermal stress on the log set and stove parts, reduced efficiency, and high levels of carbon monoxide.

Once the log set is in position, the rock wool can be placed. The rock wool which gives the fire a look of burning embers is shipped in a small plastic bag. The material is brown and fluffy. Little pieces need to be picked with tweezers and placed on the screen in front of the logs. The pieces should be as small as possible without allowing them to fall through the screen; they should be scattered over the entire screen and should touch each other as little as possible. Your patience in this exercise will be greatly rewarded.

The decorative ceramic fiber log set which will give long service when in use; however, they will break if subjected to rough or improper handling. Broken or cracked logs should be replaced. When removing and replacing the log set from the unit during routine cleaning or servicing of the unit, take care not to damage the logs and to position the log set per the instructions above. Also, take care not to chip the enamel on the door and door frame when removing and replacing the log set (if a porcelainized unit).

LIGHTING THE UNIT FOR THE FIRST TIME/INITIAL ADJUSTMENTS

Once the Sterling has been set in place and connected as described above, the unit is ready to be lit for the first time. Each Sterling is tested prior to shipment by the manufacturer, so ignition should take place without failure. However, a number of small adjustments may be necessary to compensate for variations in gas pressure, altitude and other factors particular to each installation. Lighting the Sterling for the first time and adjustments to the unit should be performed by qualified service personnel.

WARNINGS PRIOR TO FIRST LIGHTING OF UNIT

Smoke and Fumes Warning

When lit for the first time the Sterling will emit some smoke and fumes. This is normal "off-gassing" of the paints and oils used in the assembly and manufacturing of the unit. Open windows to vent the room as necessary. The off-gassing and fumes will subside after the first 10 to 20 minutes of operation.

Break-In Warning

The natural stones used in the assembly of the Sterling were polished using a water-based polishing system prior to assembly of the unit. Any residual moisture in the stones must be dried out slowly to avoid damaging the stones. This is accomplished by adhering to the following break-in procedure.

When lit the first three times, the Sterling should be burned for no more than 10 minutes, then allowed to cool for 1 to 2 hours. This gentle warming and cooling of the unit will allow any residual moisture in the stones to evaporate slowly. Once this break-in procedure has been completed, the Sterling can be burned at will with no time restrictions on the length of burn.

Pilot Light Warning

The Sterling has a piezo-electric spark ignitor (the red push button located just above the gas control valve behind the gas control valve access door) which ignites the pilot light by means of a spark at the pilot light assembly. Do not attempt to light the unit with a match or by any means other than the piezoelectric spark.

LIGHTING THE UNIT FOR THE FIRST TIME

Before lighting the unit for the first time check all around the unit for the smell of gas. Be sure to smell down by the floor as some gasses are heavier than air and will settle on the floor. If you smell gas immediately follow the What To Do If You Smell Gas warning.

WHAT TO DO IF YOU SMELL GAS

- ✓ DO NOT ATTEMPT TO LIGHT THIS GAS HEATER OR ANY APPLIANCE
- ✓ EXTINGUISH ANY OPEN FLAME
- ✓ DO NOT TOUCH ANY ELECTRICAL SWITCH
- ✓ DO NOT PLUG IN OR UNPLUG ANY APPLIANCE
- ✓ DO NOT USE ANY PHONE IN YOUR BUILDING

- ✓ OPEN WINDOWS TO VENT THE ROOM AND VACATE THE BUILDING
- ✓ TURN OFF THE MAIN GAS SUPPLY
- ✓ IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOR'S PHONE
- ✓ IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT

As an additional safety precaution prior to lighting the unit for the first time, wait 5 minutes to allow any residual gas within the unit to dissipate. If you do not smell gas after this five minute period, proceed with the lighting procedure. If you do smell gas, do not proceed with the lighting procedure. Instead, immediately refer to the What To Do If You Smell Gas warning.

Prepare for the lighting procedure by adjusting the thermostat to its lowest setting or OFF position, if so equipped. Open the gas control valve access door at the lower right side of the unit and locate the gas control knob (Figure 7). If the gas control knob is not in the OFF position, turn the knob fully clockwise ↻ to OFF. Locate the variable output control (Figure 7) and turn it fully clockwise ↻ to the highest setting.

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

- A. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gases are heavier than air and will settle on the floor. If you do smell gas, do not proceed with the lighting procedure. Instead, immediately refer to the What To Do If You Smell Gas warning.
- B. Use only your hand to 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. Any force or attempt to repair may result in fire or explosion.
- C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Set the thermostat to lowest setting.
3. Unplug the fan accessory, if so equipped.
4. Push in and turn gas control knob clockwise ↻ to "OFF".
5. Wait (5) five minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
6. Turn knob on gas control counterclockwise ↶ to "PILOT".
7. Push in control knob all the way and hold in. Immediately light the pilot with the gas lighter [push in and "click" the red piezoelectric spark ignitor button]. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back out. Pilot should remain lit. If the pilot goes out, repeat the operation.
 - If knob does not pop out 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 "OFF" and call your service technician or gas supplier.
8. Turn gas control knob counterclockwise ↶ to "ON".
9. Shut the gas control valve access door.
10. Plug in fan accessory, if so equipped.
11. Set thermostat to desired setting.

TO TURN OFF GAS TO APPLIANCE

1. Set thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Turn gas control knob fully clockwise ↻ to "OFF". Do not force.
4. Shut gas valve access door.

AS A SUPPLEMENT TO THE ABOVE INSTRUCTIONS: When pressing/clicking the red piezoelectric spark ignition button (Figure 7) to light the pilot light, watch through the glass front door of the unit. Click the red ignitor button until a flame is visible at the pilot light and once lit, continue to press on the gas control knob for another 20 seconds, then release. Ascertain that the pilot light is still lit by looking through the front door. If lit, then turn the gas control knob fully counterclockwise ↶ to the ON position. If the pilot light failed to light or if it went out due to a premature release of the gas control knob while pressed in the PILOT position, then repeat the lighting process as described above.

Once the pilot light has been lit, the main burner is lit moving the thermostat to a high setting so that it "calls" for heat (i.e. turns the unit on). The main burners should light immediately. Note that the on/off cycling of the main burner is controlled by the thermostat but that the pilot light remains lit regardless of the thermostat setting. To turn the pilot light off, turn the gas control valve fully clockwise ↻ to the OFF position.

Once the unit is lit, observe the flame pattern and adjust as necessary per the following instructions while keeping in mind the off-gassing and break-in warnings listed above.

INITIAL ADJUSTMENTS

Variable Output Control

The gas control valve is equipped with a variable output control (Figure 7). This control varies the flame height and rate of heat produced by the unit by varying the gas pressure to the main burner tube. The length of the burn cycle, however, is always controlled by the thermostat. Using the variable output control, the heat output of the unit can be reduced for mild Fall and Spring months or maximized for the colder Winter months. This adjustment can be made by the homeowner as necessary by turning the variable output control knob to HI or LO or any setting in between.

Air Shutter Adjustment

There is an adjustable air shutter located in the base of the firebox. If you are burning LP gas, the shutter should be open. If you are burning natural gas, the shutter should be half closed. The air shutter is used to regulate the air-to-gas combustion mixture which in turn influences the size and color of the flames. The air shutter is preset by the manufacturer for optimum operation. However, it may need adjustment once the unit has been installed to compensate for variations in supply line pressure, altitude and other variables.

To determine if the air shutter needs adjustment, it is necessary to view the flame pattern with the variable output control knob at its highest setting. Allow the unit to operate for 10 minutes to allow the entire unit to reach temperature and for the flame pattern to stabilize.

Generally speaking, the more air (open shutter) in the mixture, the bluer the flame. Less air (closed shutter) results in a more yellow flame, but too little air will result in incomplete combustion, low efficiency and a dirty burn.

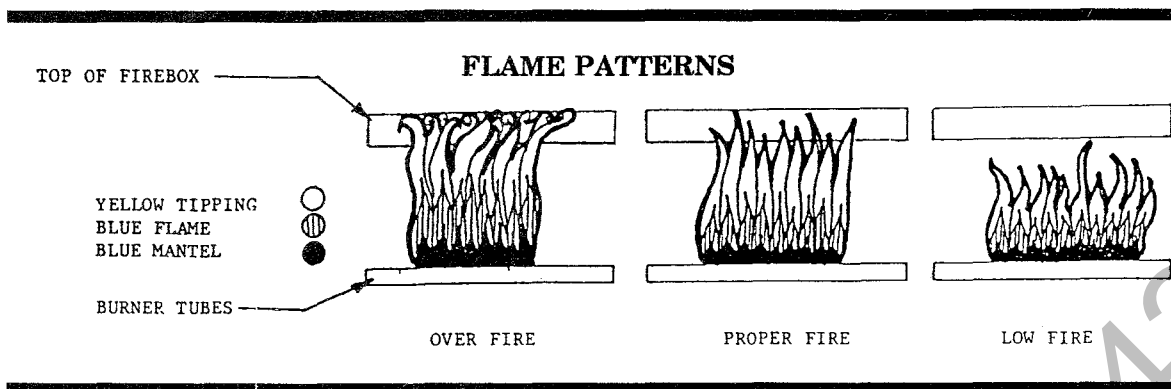
There are three simple guidelines to aid in determining the correct flame pattern:

- 1) If the flame at the base of the logs shows a lot of blue, the air shutter may be open too far
- 2) If there are a lot of flames behind the logs, the air shutter may be closed too far
- 3) No flames should extend more than 2" above the logs.

To adjust the air shutter opening, simply loosen the screw on the shutter (Figure 13) and turn the shutter either clockwise ↻ to close the air opening or counter-clockwise ↺ to open the air opening. Closing the air shutter allows less oxygen to burn and results in a higher, yellow flame. Opening the shutter allows more oxygen to burn and results in a lower, blue flame. Once the desired flame pattern is achieved, tighten the screw.

If the flame pattern continues to indicate a low flame or over-fire condition regardless of air shutter setting then it is likely that the gas supply pressure to the unit is too low or too great. Such a condition cannot be corrected through air shutter adjustment; an adjustment must be made to the gas supply pressure. Supply line and manifold gas pressure adjustments must be performed by qualified service personnel. Do not attempt to complete any part of the installation or adjustment of this unit unless technically qualified to do so.

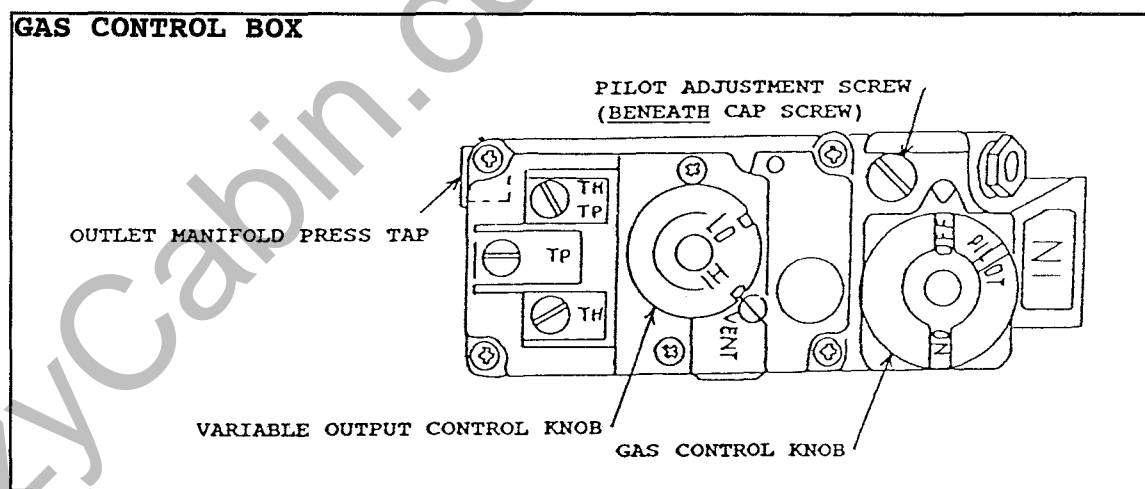
When adjusting the air shutter for flame color take care not to obtain a flame which is too yellow (shutters closed; too little oxygen). While such a flame may be aesthetically pleasing, it is the result of incomplete combustion which will eventually result in an accumulation of carbon in the firebox, on the logs, burner tubes and window glass.



Pilot Adjustment

The pilot light flame should be large enough to engulf the sensor/thermocouple located just next to the pilot light, but not so large as to create excessive noise or consume excessive gas. The pilot light is preset by the manufacturer and should not need adjustment. However, it can be adjusted by means of the pilot light adjustment screw located on the gas control valve (see below). Note that the actual adjustment screw is located beneath the cap screw labeled "pilot adjustment screw" on the gas valve. Be sure to replace the cap screw on the gas control valve once adjustments to the pilot light setting have been completed.

A critical component of the pilot light assembly is the pilot hood which serves to direct the flame of the pilot light toward the sensor/thermocouple and toward the main burner tube. A bent, dirty or otherwise defective pilot hood can result in difficult or non-ignition of the unit. Note too that the pilot light flame must properly engulf the thermopile so that the thermopile can generate sufficient millivoltage (750mv) to power the wall thermostat. Control of the Sterling by the wall-mounted thermostat may become erratic or non-existent if the pilot light flame is too small or misdirected away from the thermopile.



DAILY OPERATION

The Sterling gas-fired heater is easily operated by the homeowner once installed and adjusted. The unit is always controlled via the wall-mounted thermostat. Set the thermostat to the desired room temperature and the unit will cycle on and off as required.

By adjusting the variable output control located on the gas control valve, the rate of heat output can be varied to meet the heating requirements of the season. Choosing a low flame setting will result in longer burn cycles at a reduced output, while choosing a high flame setting will result in a shorter, hotter burn cycle. Through trial and error the homeowner can select the optimum flame size for their setting and application.

When the unit first lights, especially when cool, it is normal to experience some condensation on the inside of the window glass. This condensation will burn off within the first few minutes of operation. If continuous condensation on the window glass or dripping water from any part of the unit or venting system (chimney) is noted, immediately discontinue operation of the unit and contact qualified service personnel.

Although not required, the unit can be taken out of service if it is not to be used for a period of time, such as through the Summer months. To take the unit out of service, set the thermostat to the lowest setting or OFF position, and turn the gas control knob fully clockwise to the OFF position. When putting the unit back into service follow the lighting instructions described elsewhere in this manual.

Keep the area around the Sterling clear of combustible materials, gasoline and other flammable vapors and liquids. Do not allow the placement of items near the unit that will obstruct air flow or be ignited due to the heat from the surfaces of the stove.

ROUTINE MAINTENANCE AND CARE

The Sterling requires minimal routine maintenance and care. The unit should always be cool and off when being cleaned or maintained.

The unit should receive regular cleaning on, under and around the stove to prevent the build up of dust and lint. The exterior surfaces of the unit can be cleaned using soap and water and a soft cloth. Do not use abrasive or chemical cleaners and take care not to scratch the stones, glass or enamel finish (if so equipped) when cleaning the unit. The use of chemical or wax-based cleansers or polishes is not recommended due to the potential for discoloration of the stones when the residue of the cleansers or polishes is exposed to heat.

The firebox should receive periodic cleaning to prevent the accumulation of dust, lint and other debris. To clean the fire box, lower the thermostat to the lowest setting or OFF position (if so equipped), and turn off the gas at the gas control valve. When the unit is cool, unfasten the front door and carefully remove the decorative ceramic fiber log set taking care not to damage the logs or chip the enamel cast iron (if porcelainized). Clean the entire firebox, the burner tube and carefully vacuum the entire surface of the log set. Take care to thoroughly vacuum the ports (holes) along the top of the burner tube.

With the decorative ceramic fiber logs out of the firebox, fasten the door shut and momentarily light the unit according to the lighting instructions described elsewhere in this manual. Check to ensure that a flame is burning from each burner port and that all flames are approximately the same in height and intensity. The pilot light flame should be large enough to engulf the sensor/thermocouple as described elsewhere in this manual (Initial Adjustments: Pilot Adjustment). Turn the unit off by lowering the thermostat, turning off the gas at the gas control valve. Allow the unit to cool.

Check and clean any burner ports which are not burning or burning properly. Clean burner ports using a soft brush or vacuum cleaner. If the pilot light flame height needs adjustment it should be adjusted by qualified service personnel as described elsewhere in this manual.

Complete the cleaning procedure by carefully replacing the log set within the firebox as described elsewhere in this manual. Close and fasten the front door. Turn on the gas, light the unit and check for proper operation.

Regularly check that the area around the Sterling is kept free and clear from combustible materials, gasoline and other flammable vapors and liquids.

The unit and venting system should be inspected annually by qualified service personnel to ensure that they are clean, free of obstruction, safe and in good working order.

SERVICING AND TROUBLE SHOOTING

When servicing the unit follow the procedures described in this manual, as appropriate. Use factory-approved and generally accepted practices when servicing this appliance. Do not put into service a unit which is malfunctioning or not performing according to specifications.

The Sterling will provide trouble-free operation under most circumstances. Should the unit perform in an abnormal manner or fail to operate, immediately discontinue operation and contact service personnel for servicing. Do not attempt to service or adjust this unit unless qualified to do so.

HOW TO OBTAIN PARTS AND SERVICE

The Sterling is covered by a limited warranty for parts and labor for one year from the date of purchase. The door glass and enamel finish (if porcelainized) are not covered by the warranty. Read the warranty card supplied with the unit for complete details. Replacement parts for the Sterling are available from your dealer.

This unit must be installed, adjusted, serviced and maintained by qualified service personnel only. Failure to properly install, adjust, service and maintain this gas appliance may result in an unsafe or hazardous condition which may lead to carbon monoxide poisoning, fire, explosion, personal injury and loss of life. Do not attempt to install, adjust, service or maintain this unit unless qualified to install, adjust, service or maintain gas-fired, vented appliances.

MAIN BURNER REFUSES TO LIGHT.

Check that the gas is on, both at the gas control valve on the unit and at any manual shut off valves on the gas supply line leading to the unit.

Check that the pilot light is lit by visually confirming the presence of a flame at the pilot light assembly, looking through the front door glass, over the logs, towards the right side of the unit.

Check that the pilot light assembly is clean and free of carbon buildup. Check that the pilot light flame properly engulfs the sensor/thermocouple.

Check that the thermostat is set to a high setting (closed circuit). If there is a doubt whether the thermostat is operating properly, isolate the thermostat from the circuit by disconnecting the wires at the thermostat and connecting the wires to one another. If the unit lights with the wires crossed at the thermostat, then the malfunction is probably in the thermostat itself. Replace the thermostat.

NO PILOT LIGHT; PILOT LIGHT GOES OUT DURING OPERATION.

Pilot orifice may be plugged. Check and clean orifice. The pilot will not remain lit if the thermopile is defective. Replace thermopile.

UNIT BURNS FOR A FEW MINUTES, SHUTS OFF, THEN CYCLES ON AND OFF EVERY FEW MINUTES.

The unit is satisfying the thermostat too soon, that is, the thermostat is simply reacting to the heat output and turning the unit off. Consider thermostat placement. If the thermostat is too close to the unit, it will be satisfied by the heat output of the unit and turn the unit off before the room itself has been heated. Review the section on thermostat placement described elsewhere in this manual and relocate thermostat.

If thermostat placement is correct but a longer, milder burn is desired, lower the rate of heat output. This is accomplished by adjusting the variable output control knob located on the gas control valve as described elsewhere in this manual. Heat output is lowered, the unit will take longer to heat the space and the burn cycle will be longer.

CARBON BUILDUP ON LOGS, BURNERS, WINDOW GLASS AND/OR PILOT LIGHT ASSEMBLY.

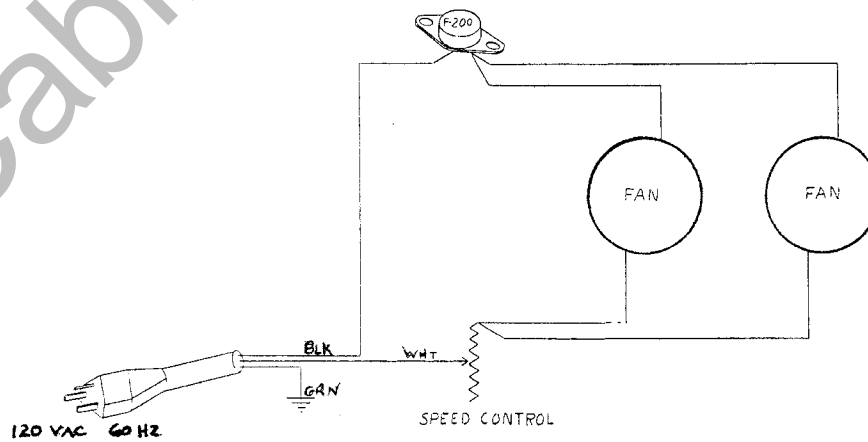
An accumulation of carbon anywhere within the firebox is indicative of incomplete burning of the gas due to a lack of combustion oxygen or too much fuel for normal levels of oxygen. Carbon build-up can often be predicted by a flame which is too yellow and too high. The cure is to first carefully clean the carbon buildup from the effected areas within the firebox, then to adjust the air shutter on the main burner tube as described elsewhere in the manual. If this doesn't correct the problem, have a qualified service person check the gas pressure. There could also be a restriction in the venting system.

FLAME IS TOO BIG, HITTING THE TOP OF THE FIREBOX. UNIT IS OVERHEATING.

1. A flame which is too big can be caused by supply line or manifold gas pressure which is too high or an improper air shutter setting on the main burner tube. Review the sections on gas pressure adjustment and air shutter settings elsewhere in this manual for proper adjustment.
2. Check elevation. If above 2,000 ft., the unit must be derated.

BROKEN GLASS ON FRONT DOOR

If the glass on the front door is broken or cracked, immediately discontinue use of the stove. Contact your local NHC Dealer for a replacement door with factory installed glazing.



APPENDIX B - SAFETY LABEL



LISTED GAS-FIRED DIRECT VENT ROOM HEATER

MODEL: STERLING DIRECT VENT

NHC-

WH-

TESTED TO: ANSI Z21.11.1-1991 "GAS FIRED VENTED ROOM HEATERS"; ANSI Z21.44-1991 "GAS FIRED GRAVITY AND FAN TYPE DIRECT VENT WALL VENT FURNACES"; UL307B "GAS BURNING HEATING APPLIANCES FOR MOBILE HOMES & RECREATIONAL VEHICLES"; CAN 1-2.1-M89 "GAS FIRED VENTED ROOM HEATERS" CGA I.R. #41-1991 "DIRECT VENT GAS FIREPLACES"; CAN/CGA-2.17-M91 "GAS FIRED APPLIANCES FOR USE AT HIGH ALTITUDES."

CERTIFIED FOR CANADA/HOMOLOGUÉ POUR LE CANADA

APPROVED FOR MOBILE HOME INSTALLATION

THIS APPLIANCE MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, THE MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARD, TITLE 24 CFP, PART 3280, AND LOCAL CODES, IF ANY; IF NOT, FOLLOW ANSI Z223.1-1992 (U.S. INSTALLATION) OR CURRENT CAN1-B14; INSTALLATION CODE (CANADIAN INSTALLATION).

	■ NATURAL GAS	■ LP
INPUT RATING (Btu/hr) 0-610m	36,400	35,300
INPUT RATING (Btu/hr) 610-1370m	34,800	33,600
ORIFICE SIZE DMS 0-610m	33	51
ORIFICE SIZE DMS 610-1370m	34	52
MANIFOLD PRESSURE (in. w.c./kPa)	3.5/0.87	10.0/2.94
MAN. PRESSURE - LO SETTING (in. w.c./kPa)	1.7/0.42	6.4/1.59
MINIMUM INLET PRESSURE (in. w.c./kPa)	4.5/1.12	11.0/2.74
MINIMUM INPUT (Btu/hr)	25,000	28,000
MAXIMUM OUTPUT (Btu/hr)	28,000	28,000

MINIMUM CLEARANCES TO COMBUSTIBLE CONSTRUCTION:

BACK OF STOVE TO BACKWALL	5"/127mm
EDGE OF TOP PLATE TO SIDEWALL	5"/127mm
EDGE OF TOP PLATE TO DIAGONAL WALL	3"/75mm
EDGE OF TOP TO ALCOVE	16"/406mm

ELECTRICAL RATING: 115

VOLTS 1 AMPERE 60 HZ.

DANGER: RISK OF ELECTRICAL SHOCK. DISCONNECT POWER BEFORE SERVICING UNIT. DO NOT ROUTE POWER CORD UNDER HEATER.

NOT FOR USE WITH SOLID FUEL.

MANUFACTURED BY:

NHC, INC. • MORRISVILLE, VERMONT 05661

DO NOT REMOVE OR COVER THIS LABEL

APPENDIX C - REPLACEMENT PARTS

<u>ITEM NO.</u>	<u>ITEM DESCRIPTION</u>
1500-	TOP STONE (SPECIFY COLOR)
1500-	SIDE STONE (SPECIFY COLOR)
1500-	FRONT CORNER STONE (SPECIFY COLOR)
1500-	FRONT BOTTOM STONE (SPECIFY COLOR)
2421-316	GLASS FRAME
2510-402	BOTTOM CASTING
2510-403F	FRONT GRILL
2510-219RS	FRONT DOOR
2510-303	BOTTOM LEG
2510-401	TOP CASTING
2510-411RF	FRONT DOOR FRAME
2510-413	SIDE LEG
2150-416	DV BAFFLE
3030-025	GLASS
3110-056	1/4" ROPE GASKET
3110-057	3/8" ROPE GASKET
3160-080	3/4" TAPE GASKET
5500-2417	SIDE RADIATION SHIELD
5210-2321	THREADED ROD
5500-2406	FIREBOX
5500-2407	BACK PLATE
5500-2408	STONE CLIPS
5500-2440	UPPER BAFFLE
5500-2413	PRIMARY AIR PLENUM
5500-2437DV	LOWER CONTROL BRACKET
5500-2469	BOTTOM HEAT SHIELD
5500-2470	LEFT REAR COVER
5500-2471	RIGHT REAR COVER
5500-2475	STRAIN RELIEF BRACKET
6400-40401	OWNER'S MANUAL
7200-001A	LOG SET
7210-101A	PILOT ASSEMBLY
7210-100	THERMOPILE
7210-103	MV IGNITOR
7200-002DV	BURNER TUBE
7000-015	THERMO WIRE
7200-506	THERMOSTAT