

Where everything comes together

Models:

SL-550TV-D, SL-550TV-IPI-D SL-750TV-D, SL-750TV-IPI-D SL-950TV-D, SL-950TV-IPI-D

This appliance has been retired. Service parts pages within have been removed. For replacement parts, please refer to the individual service parts list located on the brand websites.

Owner's Manual

Installation and Operation







CAUTION

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- · Leave this manual with party responsible for use and operation.



A WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- 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.



A WARNING

HOT! DO NOT TOUCH. SEVERE BURNS MAY RESULT. **CLOTHING IGNITION MAY RESULT.**



Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers open or removed.
- · Keep clothing, furniture, draperies and other combustibles away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. Do NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

This appliance is only for use with the type(s) of gas indicated on the rating plate.

In the Commonwealth of Massachusetts:

- installation must be performed by a licensed plumber or gas fitter;
- a CO detector shall be installed in the room where the appliance is installed.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.

Read this manual before installing or operating this appliance.

Please retain this owner's manual for future reference.

Congratulations

Congratulations on selecting a Heat & Glo gas appliance—an elegant and clean alternative to wood burning appliances. The Heat & Glo gas appliance you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new appliance, you'll want to read and carefully follow all of the instructions contained in this *Owner's Manual*. Pay special attention to all Cautions and Warnings.

This *Owner's Manual* should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

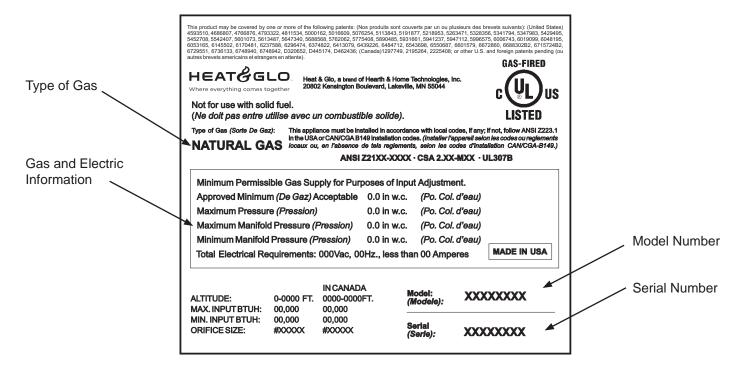
The information contained in this *Owner's Manual*, unless noted otherwise, applies to all models and gas control systems.

Your new Heat & Glo gas appliance will give you years of durable use and trouble-free enjoyment. Welcome to the Heat & Glo family of appliance products!

Homeowner Reference Information	We recommend that you record the following pertinent information about your appliance.
Model Name:	Date purchased/installed:
Serial Number:	Location on appliance:
Dealership purchased from:	Dealer Phone:
Notes:	

Listing Label Information/Location

The model information regarding your specific appliance can be found on the rating plate usually located in the control area of the appliance.



- Table of Contents -

Section 1:	Listing and Code Approvals	Section 10:	Electrical Information	
	A. Appliance Certification4		A. Recommendation for Wire	21
	B. Glass Specifications4		B. Connecting to the Appliance	21
	C. BTU Specifications4		C. Intellifire Ignition System Wiring	21
	D. High Altitude Installations5		D. Standing Pilot Ignition System Wiring	22
	E. Non-combustible Materials Specification 5		E. Junction Box Installation	23
	F. Combustible Materials Specification 5		F. Wall Switch Installation for Fan	23
Section 2:	Getting Started	Section 11:	Finishing	
	A. Design and Installation Considerations 6		A. Mantel Projections	24
	B. Negative Pressure7		B. Facing Material	24
	C. Tools and Supplies Needed8			
	D. Inspect Appliance and Components8	Section 12:	Appliance Setup	
			A. Remove Shipping Materials	25
Section 3:	Framing and Clearances		B. Remove Grate Shipping Support	25
→	A. Selecting Appliance Location9		C. Clean the appliance	25
→	B. Constructing the Appliance Chase10		D. Accessories	25
	C. Clearances10		E. Install the Refractory	25
	D. Mantel Projections11		F. Lava Rock, Vermiculite, Rockwool	
			and Ember Placement	25
Section 4:	Termination Locations		G. Positioning the Logs	26
	A. Vent Termination Minimum Clearances 12		H. Glass Assembly	30
			I. Screen Mesh	30
Section 5:	Vent Information and Diagrams		J. Grilles and Trim	30
	A. Vent Guidelines		K. Hood	30
	B. Vent System Configuration13		L. Shutter Settings	30
Section 6:	Vent Clearances and Framing	Section 13:	Operating Instructions	
	A. Pipe Clearances to Combustibles15		A. Before Lighting Appliance	31
	B. Wall Penetration Framing15		B. Check Appliance Draft	31
	C. Vertical Penetration Framing15		B. Lighting Appliance	32
			C. After Appliance is Lit	34
Section 7:	Appliance Preparation		D. Frequently Asked Questions	34
	A. Installing Outside Air Kit Damper Assembly16			
	B. Gas/Electrical Connections 16	Section 14:	Troubleshooting	
	C. Securing and Leveling Appliance17		A. Standing Pilot Ignition System	35
			B. Intellifire Ignition System	37
Section 8:	Installing Vent Pipe			
	A. Assembly of Vent Sections18	Section 15:	Maintaining and Servicing Appliance	39
	B. Attaching Vent to Firebox 18			
	C. Securing Vent Sections18	Section 16:	Reference Materials	
0	Can Information		A. Appliance Dimension Diagram	
Section 9:	Gas Information		B. Service Parts	42
	A. Fuel Conversions		C. Warranty	
	B. Gas Pressures		D. Contact Information	53
	C. Gas Connection19			

1

Listing and Code Approvals

A. Appliance Certification

MODELS: SL-550TV-D, SL-750TV-D, SL-950TV-D,

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: B-Vent Decorative

STANDARD: ANSI Z21.50-2002 • CGA2.2

This product is listed to ANSI standards for "Vented Gas Fireplaces" and "Gas Fired Appliances for Use at High Altitudes".

This model (natural gas and propane) can be installed in a bedroom (in the United States) which has a total volume of unconfined space appropriate to the particular installation. Refer to the National Fuel Gas Code ANSI Z223.1/NFPA54 (current edition), The Uniform Mechanical Code - (current edition), and local Building Officials for the options allowed in obtaining an effective bedroom volume of unconfined space.

This model (natural gas and propane) can be installed in a bedroom (in Canada) if a thermostat (**Model WH-STAT**) is installed with the unit. Consult local code authorities. Detailed installation instructions for Model WH-STAT are included with the kit.

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.

This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

S. A. COO



Heat & Glo Quality Systems registered by SGS ICS

B. Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** and **CPSC 16 CFR 1202** (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with CPSC 16 CFR Section 1201.5 "Certification and labeling requirements" which refers to 15 U.S. Code (USC) 2063 stating "...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A. and the CAN/CGA B149 Installation Codes in Canada.

C. BTU Specifications

Model(s) U.S. (0-2000 ft.) or Canada (2000-45	Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)	
SL-550TV-D	us	21,000	12,000	44
SL-550TV-IPI-D	CAN	18,900	10,800	45
SL-550TV-D (LP)	us	20,000	N/A	54
SL-550TV-IPI-D (LP)	CAN	18,000	N/A	55
SL-750TV-D	us	23,000	16,000	42
SL-750TV-IPI-D	CAN	20,700	14,400	43
SL-750TV-D (LP)	us	23,000	N/A	53
SL-750TV-IPI-D (LP)	CAN	20,700	N/A	54
SL-950TV-D	us	30,000	21,000	36
SL-950TV-IPI-D	CAN	27,000	18,900	37
SL-950TV-D (LP)	us	30,000	21,000	51
SL-950TV-IPI-D (LP)	CAN	27,000	N/A	52

D. High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

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

A WARNING

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.

E. Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered non-combustible materials.

F. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered shall be considered combustible materials.

Getting Started

A. Design and Installation Considerations

Heat & Glo B-type vent gas appliances are designed to operate with all exhaust gases expelled to the outside of the building, and combustion air pulled from the room.

CAUTION

Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

When planning an appliance installation, it's necessary to determine the following information <u>before</u> installing:

- Where the appliance is to be installed. See Sections 3 and 4.
- The vent system configuration to be used. See Sections 5 and 6.
- Gas supply piping. See Sections 7 and 9.
- Electrical wiring. See Sections 7 and 10.
- Framing and finishing details. See Sections 3, 6 and 11.
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired. See Section 10.

A WARNING



Fire Risk Explosion Risk Keep appliance dry.

- Water may damage controls.
- · Mold or rust may cause odors.



B. Negative Pressure

A WARNING



Asphyxiation Risk.

- Negative pressure can cause spillage of combustion fumes and soot.
- Fireplace needs to draft properly for safety.

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Preventing negative pressure
- Location of fireplace and chimney

Negative pressure results from the imbalance of air available for the fireplace to operate properly. Causes for this imbalance include:

- Exhaust fans (kitchen, bath, etc.)
- · Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air to furnace or air conditioning
- · Imbalances of the HVAC air handling system
- Upper level air leaks (recessed lighting, attic hatch opening, duct leaks)

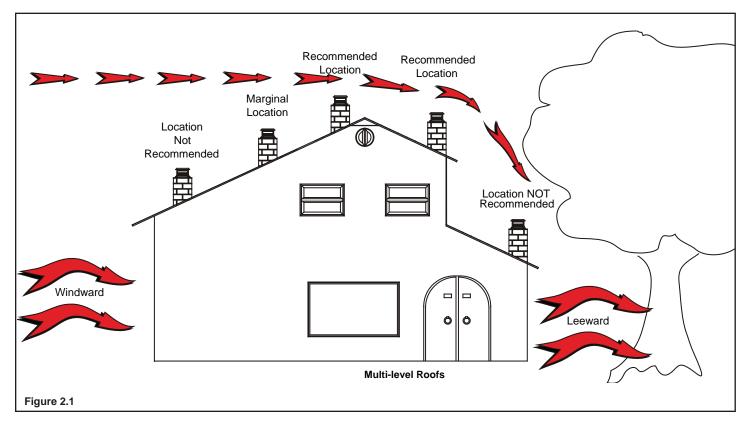
To minimize the effects of negative air pressure, the following must be considered:

- Install the fresh air kit. Install the intake on the side of the house towards prevailing winds during the heating season.
- Ensure adequate outdoor air is supplied for combustion appliances and exhaust equipment.
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace.
- Avoid installing the fireplace near doors, walkways or small isolated spaces.
- Recessed lighting should be of "sealed can" design; attic hatches weather stripped or sealed; and attic mounted ductwork and air handler joints and seams taped or sealed.
- Basement installations should be avoided due to stack effect. Stack effect creates negative pressure in lower levels. Hearth & Home Technologies recommends the use of direct vent fireplaces in basements.

Location of the fireplace and chimney will affect performance. As shown in Figure 2.1, the chimney should:

- Be installed through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind turbulence.
- Be located away from trees, adjacent structures, uneven roof lines and other obstructions.

Offsets can restrict draft so their use should be minimized. Consider the fireplace location relative to floor and ceiling and attic joists.



C. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Reciprocating saw Framing material

Pliers Hi temp caulking material

Hammer Gloves

Phillips screwdriver Framing square

Flat blade screwdriver Electric drill and bits (1/4 in.)

Plumb line Safety glasses
Level Tape measure

Manometer Voltmeter
Non-corrosive leak check solution

1/2 - 3/4 inch length, #6 or #8 Self-drilling screws One 1/4 inch female connection (for optional fan).

D. Inspect Appliance and Components



A WARNING

Inspect appliance and components for damage. Damaged parts may impair safe operation.

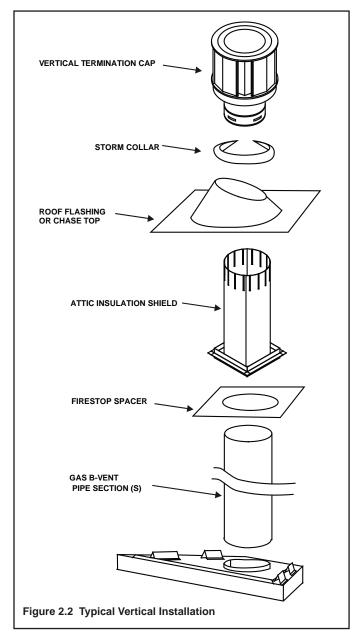


- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components.

Report suspected damaged parts to dealer.

The following B-vent components are needed for installation (see Figure 2.2).

- Fireplace Box
- · Pipe Components
- Firestops
- · Attic Insulation Shield
- Elbows
- Strapping
- · Roof Flashing or Chase Top
- Termination Cap
- Storm Collar
- Carefully remove the appliance and components from the packaging.
- The vent system components and trim doors are shipped in separate packages.
- The gas logs may be packaged separately and must be field installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.



 Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.



A WARNING

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- · Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

Framing and Clearances

NOTE:

- Illustrations reflect typical installations and are <u>FOR DESIGN PURPOSES ONLY</u>.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

A. Selecting Appliance Location

When selecting a location for your appliance it is important to consider the required clearances to walls (see Figure 3.1).

A WARNING



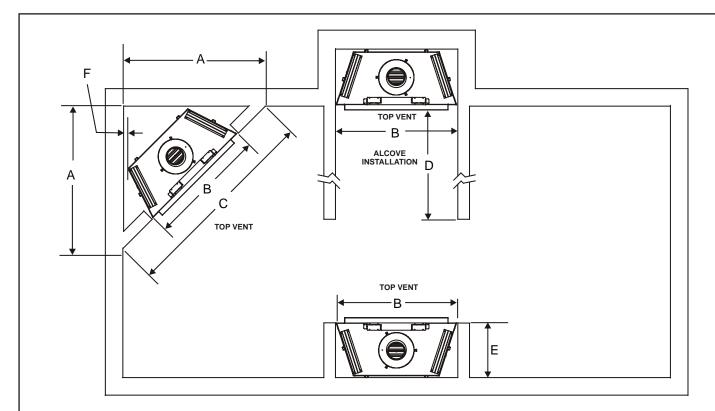
Fire Risk

Provide adequate clearance:

- · Around air openings
- · To combustibles
- · For service access

Locate appliance away from traffic areas.

NOTE: For actual appliance dimensions refer to Section 16.



Model		Α	В	С	D	E	F
SL-550TV-D	Inches	41-1/2	37	58-3/4		16-1/4	1/2
3L-3301V-D	Millimeters	1054	940	1492		413	13
SL-750TV-D	Inches	45	42	63-3/4	36 Inches 914 Millimeters	16-1/4	1/2
3L-7501V-D	Millimeters	1143	1067	1619	Maximum	413	13
CL OFOTV D	Inches	50	49	70-3/4		16-1/4	1/2
SL-950TV-D	Millimeters	1270	1245	1792		413	13

In addition to these framing dimensions, also reference the following sections:

- Clearances and Mantel Projections (Sections 3.C and 3.D)
- Vent Clearances and Framing (Section 6).

Figure 3.1 Appliance Locations

B. Constructing the Appliance Chase

A chase is a vertical boxlike structure built to enclose the gas appliance and/or its vent system. Vertical vents that run on the outside of a building may be, but are not required to be, installed inside a chase.

Construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Local building codes **MUST** be checked.

Chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner.

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped for maximum air tightness.

To further prevent drafts in cold climates, the firestops should be caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temp caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

C. Clearances

A WARNING



Fire Risk.

Odor Risk.

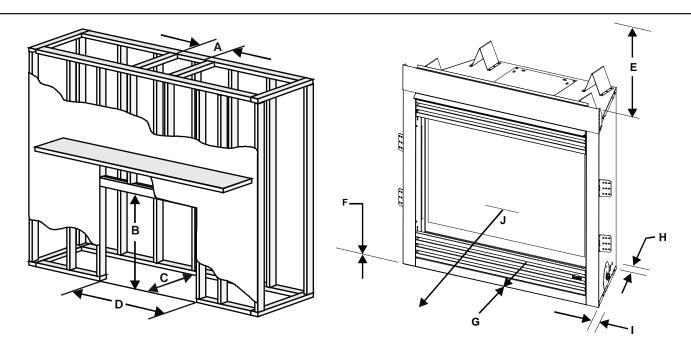
- Install appliance on hard metal or wood surfaces extending full width and depth of appliance.
- Do NOT install appliance directly on carpeting, vinyl, tile or any combustible material other than wood.
- Do NOT place furniture or any other combustible household objects within 36 inches of the appliance front.

A WARNING



Fire Risk.

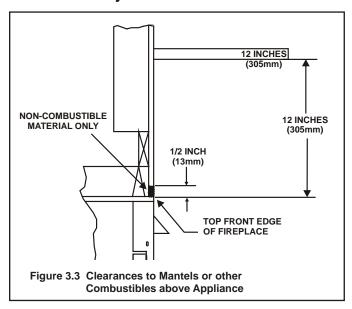
- Construct chase to all clearance specifications in manual.
- Locate and install appliance to all clearance specifications in manual



Models		Α	В	С	D	E	F	G	Н	I	J
SL-550TV-D	Inches	10	33	16-1/4	37	31	0	0	1/2	1/2	36
SL-5501V-D	mm	254	838	413	940	787	0	0	13	13	914
OL 750TV D	Inches	10	38-1/4	16-1/4	42	31	0	0	1/2	1/2	36
SL-750TV-D	mm	254	971	413	1067	787	0	0	13	13	914
SL-950TV-D	Inches	10	42-1/4	16-1/4	49	31	0	0	1/2	1/2	36
	mm	254	1073	413	1245	787	0	0	13	13	914

Figure 3.2 Clearances to Combustibles

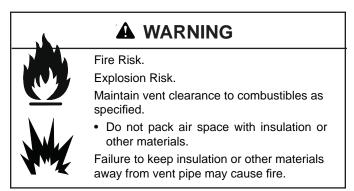
D. Mantel Projections





Termination Locations

A. Vent Termination Minimum Clearances



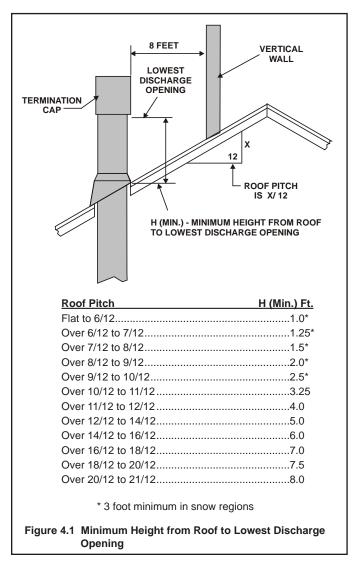
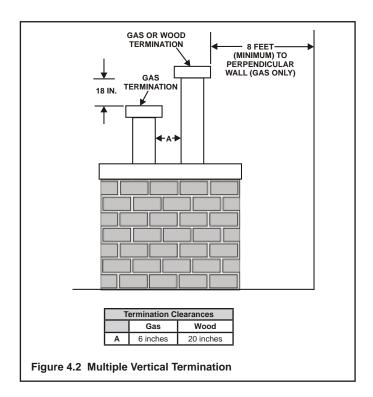


Figure 4.1 specifies minimum vent heights for various pitched roofs.



Vent Information and Diagrams

A. Vent Guidelines

WARNING



Fire Risk.

Asphyxiation Risk.

This appliance requires the specified pipe for

 Incorrect pipe may cause spillage, condensation and overheating.

These models require the following size B-vent double wall, or single wall rigid or flex vent pipe.

Models	Pipe Size
SL-550TV-D, SL-550TV-IPI-D	5 inches
SL-750TV-D, SL-750TV-IPI-D	5 inches
SL-950TV-D, SL-950TV-IPI-D	6 inches

- B-vent pipe MUST be used when the vent system is within combustible construction.
- Single wall rigid or flexible vent may be used <u>ONLY</u> if the vent system is installed within non-combustible construction such as a masonry chimney.
- Follow pipe manufacturer's installation guidelines when installing the appliance.

WARNING



Fire Hazard.

Explosion Risk.

Asphyxiation Risk.

Do NOT connect this gas appliance to a chimney flue serving a separate solid-fuel or gas burning appliance.



- · Vent this appliance directly outside.
- Use separate vent system for this appliance.

May impair safe operation of this appliance or other appliances connected to the flue.

B. Vent System Configuration

CAUTION

ALL vent configuration specifications MUST be followed.

- This product is tested and listed to appliance and vent manufacturer's specifications.
- · Appliance performance will suffer if specifications are not followed.

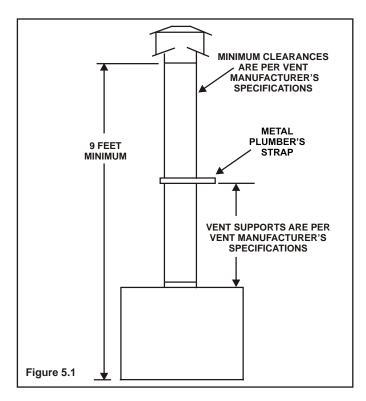
Rise to Run Ratio = 2:1

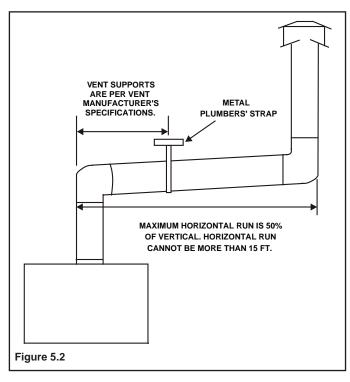
Maximum Total Horizontal Run = 15 Feet

Minimum Total Vertical Rise = 9 Feet

Maximum Total Vertical Rise = 30 Feet

Maximum Number of Elbows: Two 90° or Four 45°





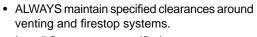
A WARNING



Fire Risk.

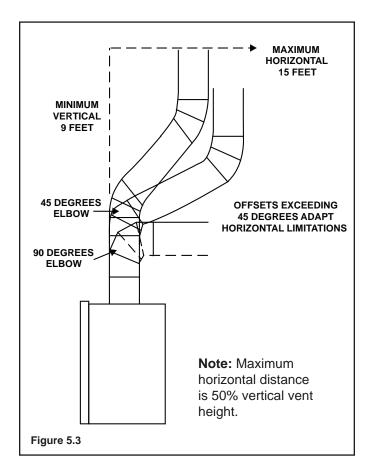
Explosion Risk.

Insulation and other combustibles must not infringe on clearances.



· Install firestops as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.



14



Vent Clearances and Framing

A. Pipe Clearances to Combustibles

A WARNING



Fire Risk.

Explosion Risk.

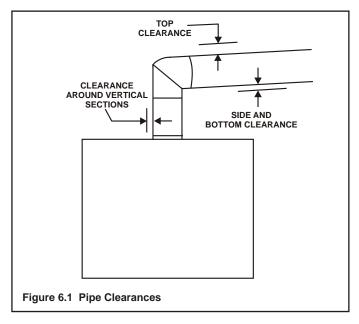
Maintain vent clearance to combustibles as specified.



 Do not pack air space with insulation or other materials.

 National building codes recommend using attic shield to keep loose materials/insulation from contacting vent.

Failure to keep insulation or other materials away from vent pipe may cause fire.



Follow vent pipe manufacturer's instructions for all clearances around pipe.

C. Vertical Penetration Framing

Use B-vent manufacturer's firestops to provide adequate clearances.

A WARNING



Fire Hazard

Keep loose materials or blown insulation from touching the vent pipe.

- National building codes recommend using attic shield to keep loose materials/ blown insulation from contacting vent.
- Hearth & Home Technologies requires the use of an attic shield.

Appliance Preparation



CAUTION

Sharp Edges

 Wear protective gloves and safety glasses during installation.



A. Installing Outside Air Kit Damper Assembly



A WARNING

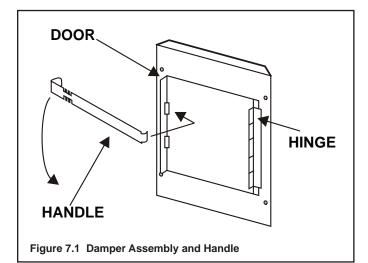
Asphyxiation Risk.

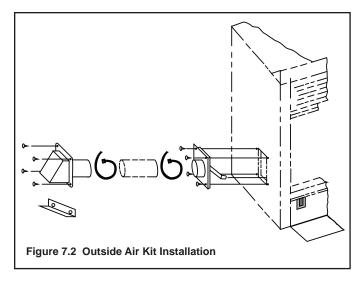
Fire Risk.



Do NOT draw outside combustion air from:

- · Wall, floor or ceiling cavity.
- Enclosed space such as an attic or garage.
- Close proximity to exhaust vents or chimneys. Fumes or odor may result.
- Remove and discard cover plate or knockout from side of appliance.
- · Open air kit damper slightly.
- Locate door hinge toward back of appliance (see Figure 7.1).





- Attach damper assembly to appliance using screws provided (see Figure 7.2).
- Insert narrow end of handle through tab and into upper slot of door.
- Check handle operation. Pull handle out to open, and in to close.

B. Gas and Electrical Connections

If applicable, ensure that gas and electrical connections are installed at this time. Refer to Sections 9 (Gas Information) and 10 (Electrical Information).

C. Securing and Leveling Appliance

▲ WARNING

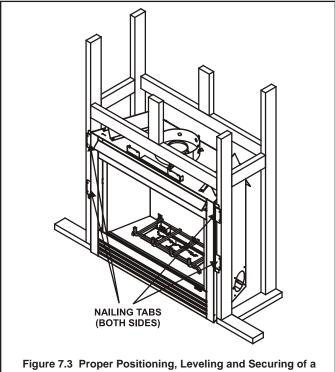


Fire Risk.

- Prevent contact with sagging, loose insulation.
- Do NOT install against combustible materials such as exposed insulation, plastic and insulation backer.

The diagram shows how to properly position, level, and secure the appliance (see Figure 7.3). Nailing tabs are provided to secure the appliance to the framing members.

- Place the appliance into position.
- Level the appliance from side to side and front to back.
- · Shim the appliance, as necessary. It is acceptable to use wood shims.
- Bend out nailing tabs on each side.
- · Keep nailing tabs flush with the framing.
- · Secure the appliance to the framing by using nails or screws through the nailing tabs.



Appliance

CAUTION

Do NOT notch into the framing around the appliance spacers.

8

Installing Vent Pipe

A. Assembly of Vent Sections

This B-Vent appliance requires 5-inch (SL-550/750TV-D) or 6-inch (SL-950TV-D) B-vent double-wall pipe. Follow the pipe manufacturer's installation guidelines when installing the unit. This will ensure proper operation and prevent safety hazards.

A WARNING



Fire Risk

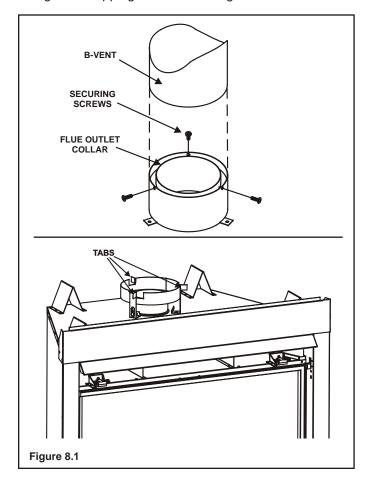
Exhaust Fumes Risk

Impaired Performance of Appliance

- Assemble pipe sections per B-vent manufacturer's instructions.
- Use support tabs for screws.Screws must not exceed or
 - Screws must not exceed one inch long and must not penetrate inner lining.
 - · Pipe may separate if not properly joined.

B. Attaching Vent to Firebox

Attach the first B-Vent component to the flue outlet collar using 3 self-tapping screws. See Figure 8.1.



C. Securing Vent Sections

Secure vent sections with vent supports following B-vent manufacturer's instructions.

A WARNING



Fire Risk.

Explosion Risk.

Combustion Fume Risk.

Use vent run supports per vent manufacturer's installation instructions.



Connect vent sections per vent manufacturer's installation instructions.

- · Maintain all clearances to combustibles.
- Maintain specified slope (if required).

Improper support may allow vent to sag or separate.

Gas Information

A. Fuel Conversions

Before making gas connections ensure that appliance being installed is compatible with the available gas type.

Any natural or propane gas conversions necessary to meet the appliance and locality needs must be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressures

Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following NFPA51.

WARNING



Fire Risk.

Explosion Hazard.

High pressure will damage valve.

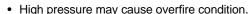


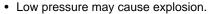
- Disconnect gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.



WARNING

Verify inlet pressures.







 Verify minimum pressures when other household gas appliances are operating.

Install regulator upstream of valve if line pressure is greater than 1/2 psig.

Pressure requirements for appliance are shown in the table below. Minimum pressure must be met when other household gas appliances are operating.

Pressure	Natural Gas	Propane
Minimum Inlet	5.0 inches	11.0 inches
Pressure	W.C.	W.C.
Maximum Inlet	14.0 inches	14.0 inches
Gas Pressure	W.C.	W.C.
Manifold Pressure	3.5 inches	10.0 inches
Marillolu Fressure	W.C.	W.C.

C. Gas Connection

NOTE: Have the gas supply line installed in accordance with local building codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)

NOTE: A listed (and Commonwealth of Massachusetts approved) 1/2 inch (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 inch (13 mm) control valve inlet.

· If substituting for these components, please consult local codes for compliance.

Refer to Reference Section 16 for location of gas line access in appliance.

NOTE: Gas line may be run from either side of the appliance provided the hole in the outer wrap does NOT exceed 2-1/2 inches in diameter and does not penetrate the firebox.



A WARNING

Gas Leak Risk

Support control when attaching pipe to prevent bending gas line.

NOTE: The gap between the supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, un-faced insulation to prevent cold air infiltration.

- Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 inch connection on the manual shutoff valve.



WARNING

Fire or Explosion Hazard

- Gas build-up during line purge may ignite.
- Purge should be performed by qualified technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.
- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.



WARNING



CHECK FOR GAS LEAKS

Explosion Risk

Fire Risk

Asphyxiation Risk



- · Check all fittings and connections.
- Do not use open flame.
- After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially-available, noncorrosive leak check solution. Be sure to rinse off all leak check solution following testing.

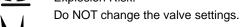
Fittings and connections may have loosened during shipping and handling.



A WARNING

Fire hazard.

Explosion Risk.





Changing valve settings may result in fire hazard or bodily injury.

HIGH ALTITUDE INSTALLATIONS

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

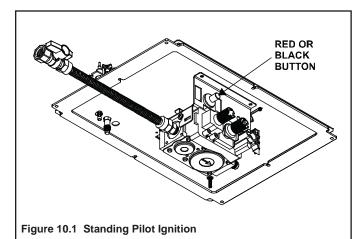
If installing this appliance at an elevation above 4500 feet (in Canada), check with local authorities.

Electrical Information

A. Recommendation for Wire

This appliance requires 110-120 VAC be wired to the junction box either for use of optional accessories (standing pilot ignition) or for proper operation of the appliance (Intellifire ignition). Refer to Figure 10.1 to determine if the appliance uses an Intellifire ignition system or Standing Pilot ignition system.

Open the control access panel to view wiring system and gas valve. If this appliance has a red or black ignitor button (as noted in Figure 10.1) this appliance has a Standing Pilot ignition system. If there is no red or black ignitor button, this appliance has an Intellifire ignition system.



NOTE: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-latest edition or the Canadian Electric Code, CSA C221.1.

B. Connecting to the Appliance



A WARNING

Wire 110V to electrical junction box. Do NOT wire 110V to valve. Do NOT wire 110V to wall switch.

- W
- · Incorrect wiring will damage millivolt valves.
- Incorrect wiring will override IPI safety lockout and may cause explosion.
- This appliance MUST be used with a wall switch or a remote control.
- If using thermostat use one compatible with a millivolt gas valve system.
- Follow parameters for locating thermostat (see individual thermostat instructions) to ensure proper operation of appliance.

- Use low resistance thermostat wire for wiring from ignition system to the wall switch and thermostat.
- Keep wire lengths short as possible by removing any excess wire length.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

C. Intellifire Ignition System Wiring

This appliance requires a 110 VAC supply to the appliance junction box for operation. A wiring diagram is shown in Figure 10.2.

This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.

This appliance is supplied with a battery pack and a 3 volt AC transformer, which requires the installation of the supplied junction box. It is highly recommended that the junction box be installed at this time to avoid reconstruction.

The battery pack requires two D cell batteries (not included).

NOTE: Batteries cannot be placed in the battery pack while using the 3 volt AC transformer. The transformer must be unplugged if the battery pack is used or battery life will be reduced.

CAUTION

Battery polarity must be correct or module damage will occur.

Optional Accessories Requirements

Wiring for optional accessories should be done now to avoid reconstruction.

CAUTION

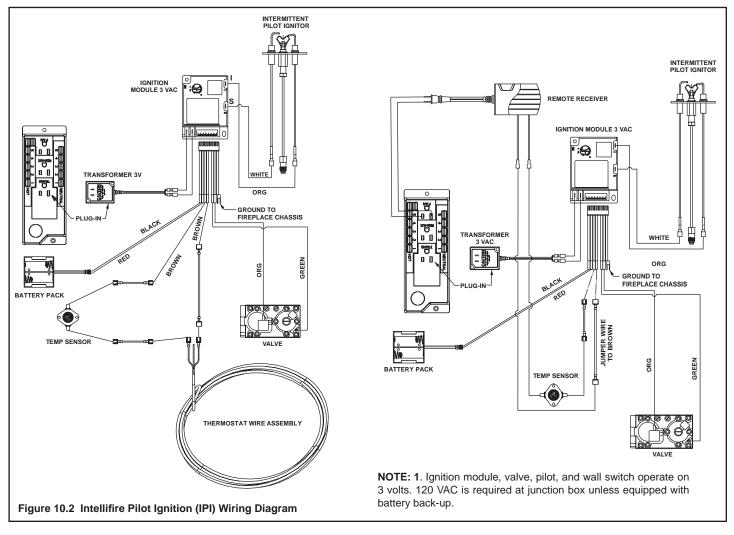
Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.



A WARNING

Shock hazard.

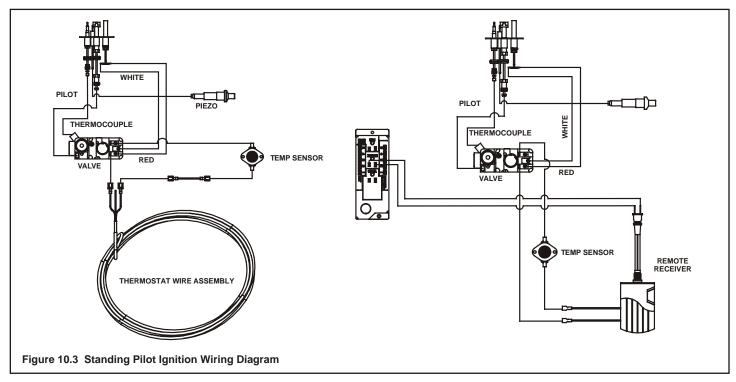
- Replace damaged wire with type 105° C rated wire.
- Wire must have high temperature insulation.



D. Standing Pilot Ignition System Wiring

This standing pilot ignition system wiring does not require a 110 VAC supply to operate.

It is recommended that a 110 VAC junction box be installed for use with a fan or remote control. (See Figure 10.4 for junction box wiring).



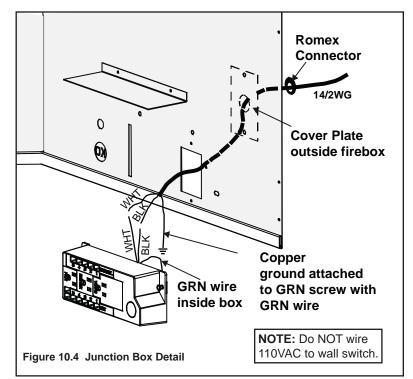
E. Junction Box Installation

If the box is being wired from the **OUTSIDE** of the appliance:

- Remove the cover plate located on the outer shell right side (see Figure 10.4).
- Install the supplied Romex[™] connector in the cover plate.
- Feed the necessary length of wire through the connector.
- Make all necessary wire connections and reattach the cover plate to the outer shell.

If the box is being wired from the **INSIDE** of the appliance:

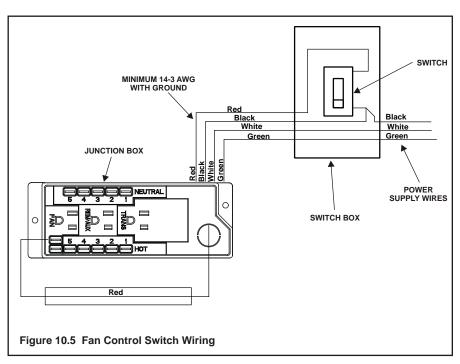
- Remove the screw attaching the junction box/receptacle to the outer shell, rotate the junction box/receptacle inward to disengage it from the outer shell (see Figure 10.4).
- Pull the electrical wires from outside the appliance through this opening into the valve compartment.
- Feed the necessary length of wire through the connector.
- Make all necessary wire connections to the junction box/receptacle and reassemble the junction box/ receptacle to the outer shell.



F. Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan (See Figure 10.5):

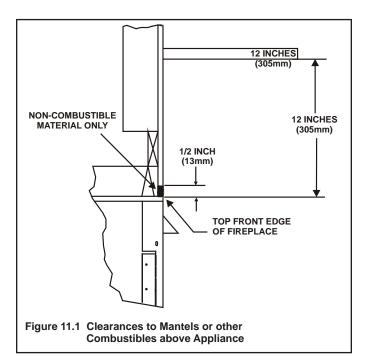
- The power supply for the appliance must be brought into a switch box.
- The power can then be supplied from the switch box to the appliance using a minimum of 14-3 with ground wire.
- At the switch box connect the black (hot) wire and red (switch leg) wire to the wall switch as shown.
- At the appliance connect the black (hot), white (neutral) and green (ground) wires to the junction box as shown.
- Add a 1/4 inch insulated female connector to the red (switch leg) wire, route it through the knockout in the face of the junction box, and connect to the top fan switch connector (1/4 inch male) as shown.



Finishing

A. Mantel Projections

Figure 11.1 shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.



B. Facing Material

WARNING



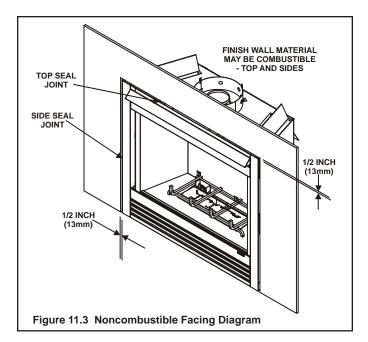
Fire Risk.

Do NOT obstruct air inlet or outlet grilles. Do NOT modify grilles.

· Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:

- Air flow through grilles or louvers.
- Operation of louvers or doors.
- Access for service.





WARNING

Fire Risk.

Finish all edges and fronts to clearances and specifications listed in manual.

- · Black metal appliance front may be covered with noncombustible material only.
- Do NOT overlap combustible materials onto appliance
- Install combustible materials up to specified clearances on top front and side edges.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.

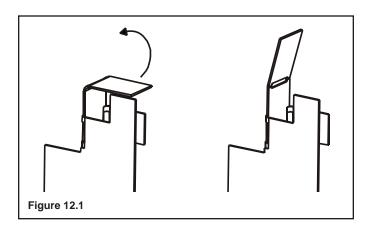
Appliance Setup

A. Remove Shipping Materials

Remove shipping materials from inside or underneath the firebox.

B. Remove Grate Shipping Support

- Remove the log pack and hood, if applicable.
- Bend top retaining tab of grate shipping support into vertical position (see Figure 12.1).
- Lift grate slightly upward with one hand so that the grate clears the support.
- Slide shipping support to side, remove and discard.
- · Lower grate onto refractory.



C. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

D. Accessories

Install approved accessories per instructions included with accessories. See Service Parts List for appropriate accessories. Refer to Section 16.



WARNING

Shock or fire risk.

Use ONLY optional accessories approved for this appliance.

- Using non-listed accessories voids warranty.
- Using non-listed accessories may result in a safety hazard.
- Only Hearth & Home Technologies approved accessories may be used safely.

E. Install the Refractory

F. Lava Rock, Vermiculite, Rockwool/ **Ember Placement**

WARNING



Explosion Risk.

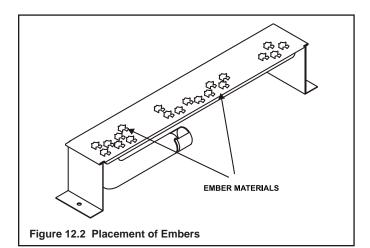
- · Follow ember placement instructions in manual.
- Do NOT place embers directly over burner ports.
- · Replace ember material annually.

Improperly placed embers interferes with proper burner operation.

Placing the Ember Material

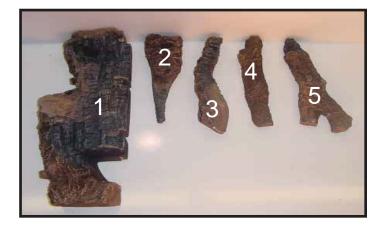
Ember material is shipped with this gas appliance. To place the ember material:

- When placing Glowing Embers[®] onto the burner care should be taken so that the ports are not covered. Place the dime-size ember pieces about 1/2 inch apart near port holes in burner top, but not on or in between the ports. For best performance do NOT place embers on ports at rear of burner (see Figure 12.2). Failure to follow this procedure will likely cause lighting and sooting problems.
- Save the remaining ember materials for use during appliance servicing. The embers provided should be enough for 3 to 5 applications.



G. Positioning the Logs

If the gas logs have been factory installed they should not need to be positioned. If the logs have been packaged separately, refer to the following instructions.

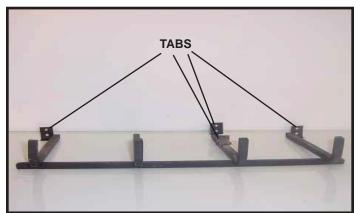


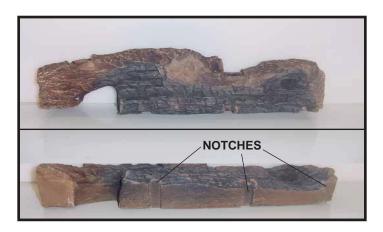
Log Set Assembly: LOGS-SL550-D

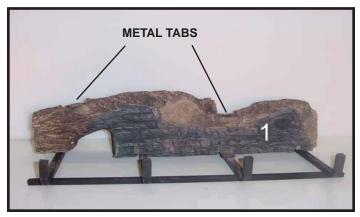
Models: SL-550TV-D

Carefully remove the logs from the packaging.

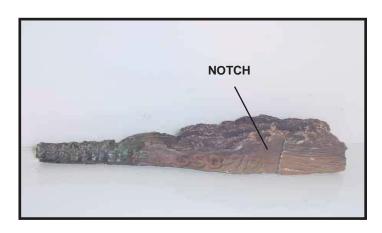
CAUTION: Logs are fragile!





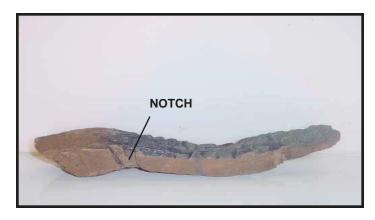


LOG #1 (SRV2044-700): Place log #1 onto the grate bars so that the notches in the bottom of the log fit onto the grate bars. Slide the log to the front tab for NG, slide to the rear tab for LP.



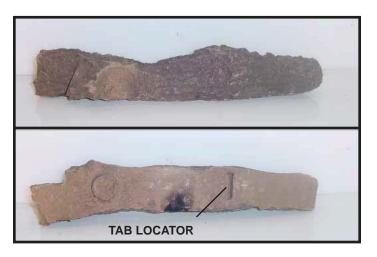


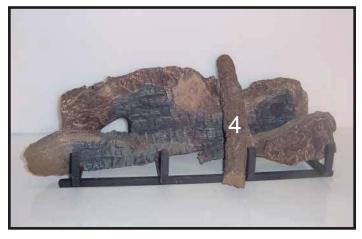
LOG #2 (SRV550-717): Place log #2 on the right two grate bars using the notch on the bottom of log #2. Slide the right edge of log #2 forward until it touches the grate.



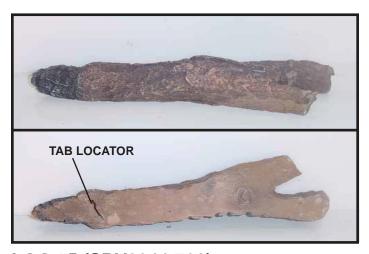


LOG #3 (SRV2044-703): Place log #3 on the left two grate bars using the notch on the bottom of log #3. Slide the left edge of log #3 forward until it touches the grate.





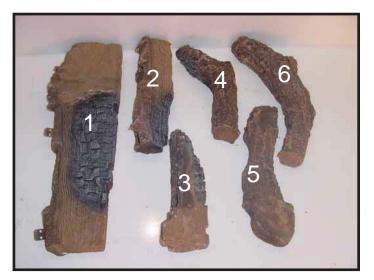
LOG #4 (SRV2044-701): Place log #4 into the tab on log #1. The bottom notch of log #4 should sit on the grate as shown.





LOG #5 (SRV2044-702): Place log #5 into the tab in log #1. The "Y" end of log #6 should fit around the grate as shown.

If the gas logs have been factory installed they should not need to be positioned. If the logs have been packaged separately, refer to the following instructions.

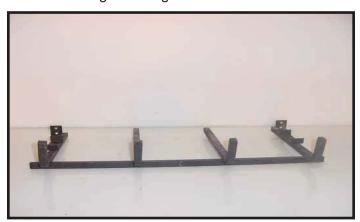


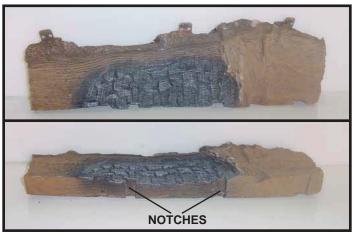


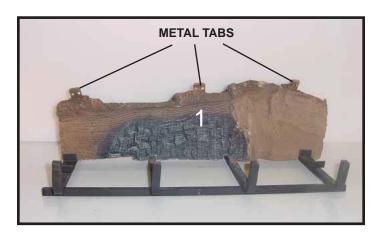
Models: SL-750TV-D, SL-950TV-D

Carefully remove the logs from the packaging.

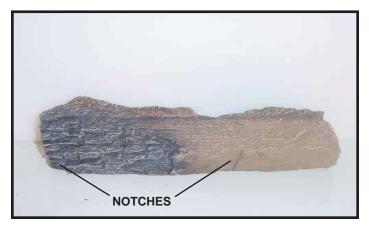
CAUTION: Logs are fragile!

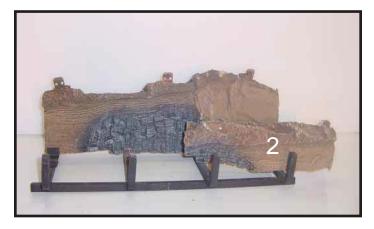




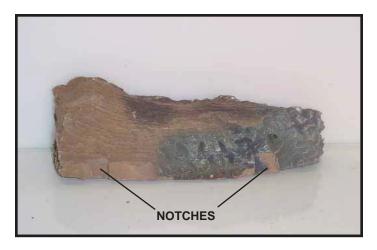


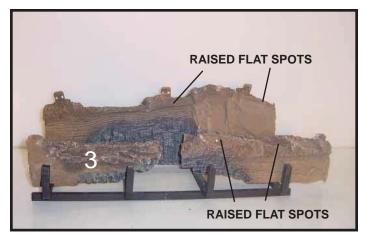
LOG #1 (SRV2045-700): Place log #1 on the grate using the notches in the bottom of the log. Slide log #1 up to the front tabs for NG. Slide it back until top of log touches the back of the fireplace for LP.



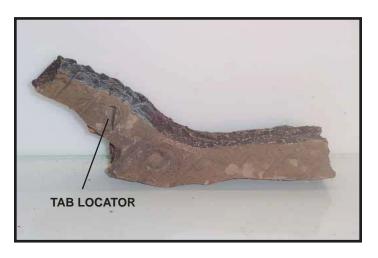


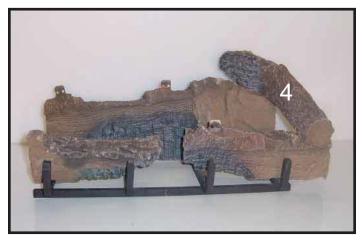
LOG #2 (SRV530-719): Place log #2 on the right two grate bars using the notches in the bottom of the log. Slide the log backward until the back edge is in contact with the tab and parallel to log #1.



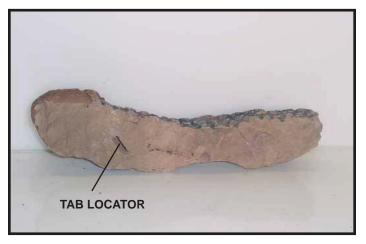


LOG #3 (SRV530-718): Place log #3 on the left two grate bars using the notches in the bottom of the log. Position log parallel to log #1 and on the same line as log #2. Left edge of log should rest between grate bar and second tab.



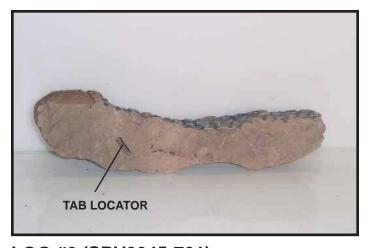


LOG #4 (SRV2045-703): Place log #4 on top of log #1 and log #2 so that the cutouts on the bottom of log #4 fit on the tab on log #1 and will fit in the flat spot on log #2.





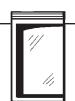
LOG #5 (SRV2045-702): Place log #5 on the tab on log #1 so that the cutouts on the bottom of log #5 fit onto the raised flat spots on log #2.





LOG #6 (SRV2045-701): Place log #6 so that the right edge fits into the notch on log #5, the middle goes into the tab on log #1, and the left edge rests on log #3.

H. Glass Assembly



A WARNING

Handle glass doors with care.

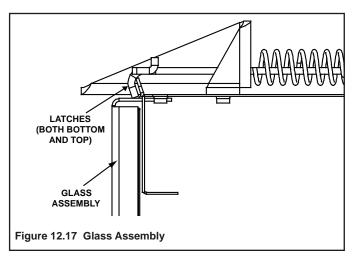
- Inspect the gasket to ensure it is undamaged.
- Inspect the glass for cracks, chips or scratches.
- Any scratch in glass, requires replacement.
- · Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass door removed, cracked, broken or scratched.
- Replace glass door assembly as a complete appliance.

Removing Glass Assembly

Pull the four glass assembly latches out of the groove on the glass frame. Remove glass door from the appliance (see Figure 12.17).

Replacing Glass Assembly

Replace the glass door on the appliance. Pull out and latch the four glass assembly latches into the groove on the glass frame.



I. Screen Mesh

The screen mesh is a protective barrier and must be attached.

J. Grilles and Trim

Install optional marble and brass trim surround kits as desired. Marble, brass, brick, tile, or other non-combustible materials can be used to cover up the gap between the sheet rock and the appliance.

Do not obstruct or modify the air inlet/outlet grilles or hood. When overlapping on both sides, leave enough space so that the bottom grille can be lowered and the trim door removed.

K. Hood

Hood is included with the front and required in all installations.

L. Shutter Settings

Models	NG	LP
SL-550TV-D	1/4 in.	3/8 in.
SL-750TV-D	1/4 in.	3/8 in.
SL-950TV-D	3/8 in.	Full open

Operating Instructions

A. Before Lighting Appliance

Before lighting this appliance determine if it has a Standing Pilot or Intellifire ignition system by opening the control access panel to view wiring system and gas valve. If this appliance has a red or black ignitor button (see Figure 10.1) this appliance has a Standing Pilot ignition system. If there is no red or black ignitor button, this appliance has an Intellifire ignition system.

CAUTION

If installing Intellifire ignition battery backup:

- Do not install batteries if the backup mode may not be used for extended time.
- · Batteries may leak.
- Install batteries only when needed for power outage.

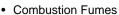
Before operating this appliance have a qualified technician:

- · Remove all shipping materials from inside and/or underneath the firebox.
- Review proper placement of logs, rockwool, lava rock, and vermiculite.
- · Check the wiring.
- · Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position.
- Ensure that the flow of combustion and ventilation air is not obstructed (front grilles and vent caps).



WARNING

Glass door must be in place when appliance is operating. Risk of:







Do NOT operate appliance with glass door removed.

- · Open viewing glass for servicing only.
- Glass door MUST be in place and sealed before operating appliance.
- Only use glass door certified for use with appliance.
- · Glass replacement should be done by qualified technician.

A WARNING

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.



WARNING

HOT! DO NOT TOUCH. SEVERE BURNS MAY RESULT. **CLOTHING IGNITION MAY RESULT.**

Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers open or removed.
- Keep clothing, furniture, draperies and other combustibles

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. Do NOT operate the appliance with the protective barrier removed. Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

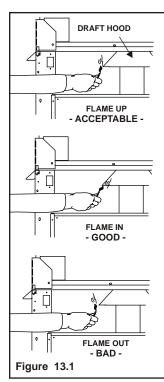
WARNING

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

B. Check Appliance Draft

Check draft of appliance to verify proper venting conditions.

- · Close all windows and doors, turn on all exhaust fans in home.
- · Appliance is to be completely assembled to normal operating condition.
- Turn on appliance and allow to operate for at least 10 minutes.
- · Check draft as shown in Figure 13.1. This can be done using a smoke or flame producing match.
- Hold lit match at bottom edge of draft hood opening and observe flame/smoke per the figure.



Intellifire Ignition

── FOR YOUR SAFETY ── READ BEFORE LIGHTING

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

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. Do not try to light the burner by hand.
- B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

· Do not try to light any appliance.

- A. This appliance is equipped with an intermittent pilot ignition (IPI)
 On not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
 - 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.

WARNING:

DO NOT CONNECT 110 VAC TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION:

Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

Do not operate the appliance with panel(s) removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

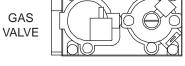
Also Certified for Installation in a Bedroom or a Bedsitting Room.

For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

LIGHTING INSTRUCTIONS (IPI)

- Turn off all electric power to the appliance.
- 2. This appliance is equipped with an ignition device which automatically lights the burner. Do <u>not</u> try to light the burner by hand.



- 3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you don't smell gas, go to next step.
- 4. Turn on all electric power to the appliance
- To light the burner, flip the ON/OFF switch to the "ON" position. (The ON/OFF switch may include a wall switch if so equipped).
- If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

GAS TO APPLIANCE

- **1.** Turn off all electric power to the appliance if service is to be performed.
- 2. Flip ON/OFF switch to the "OFF" position

Final Inspection by _____

593-913D

FOR YOUR SAFETY READ BEFORE LIGHTING

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

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

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.
- 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. Force or attempted repair may result in a fire or explosion.
- 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.

WARNING:

DO NOT CONNECT 110 VAC TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION:

Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

Do not operate the appliance with panel(s) removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

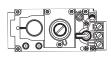
Also Certified for Installation in a Bedroom or a Bedsitting Room.

For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

] LIGHTING [INSTRUCTIONS

- 1. Turn off all electric power to the appliance.
- 2. Push in gas control knob slightly and turn clockwise to "OFF".



NOTE: Knob cannot be turned from "PILOT" to "OFF unless knob is pushed in slightly. Do not force.

- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you don't smell gas, go to next step.
- Find the pilot. The pilot is inside combustion chamber next to the main burner.



- Turn knob on gas control counter clockwise to "PILOT".
- 6. Push in control knob all the way and hold in. Immediately depress red or black piezo button. It may require several depressions of the red or black piezo button until PILOT lights. If PILOT light does not light after 10 seconds, return to step 3. Continue to hold the control knob in for about one minute after the pilot is lit. Release knob and it will pop back out. Pilot should remain lit. If it goes out, repeat steps 3 through 6.
- If 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.
- 7. Turn gas control knob counterclockwise to "ON".
- 8. To light Burner, flip the on/off switch to the "ON" position, and close access grille.
- 9. Turn on all electric power to the appliance.

GAS TO APPLIANCE

- Turn off all electric power to the appliance if service is to be performed.
- 2. Open control access panel.
- 3. Move switch to "OFF" position.
- **4.** Push in gas control knob slightly and turn clockwise to OFF". Do not force.
- 5. Close control access panel.

464-903G

D. After Appliance is Lit

Initial Break-in Procedure

When you light the appliance, you may notice that it produces heat which does have an associated odor or smell. If you feel this odor is excessive it may require the initial three to four hour continuous burn on high followed by a second burn up to 12 hours to fully drive off any odor from paint and lubricants used in the manufacturing process. Condensation of the glass is normal.

NOTE: The appliance should be run three to four hours on the initial start-up. Turn it off and let it cool completely. Remove and clean the glass. Replace the glass and run the appliance for an additional 12 hours. This will help to cure the products used in the paint and logs.

During this break-in period it is recommended that some windows in the house be opened for air circulation. This will help avoid setting off smoke detectors, and help eliminate any odors associated with the appliance's initial burning.



▲ WARNING

Fire Risk.

High Temperatures.

Keep combustible household items away from appliance. Do NOT obstruct combustion and ventilation air.

- Do NOT place combustible items on top of or in front of appliance.
- Keep furniture, draperies away from appliance.

CAUTION

- Prevent accidental appliance operation when not attended.
- Unplug or remove batteries from remote control if absent or if appliance will not be used for an extended period of time
- Property damage possible from elevated temperatures.

CAUTION

Smoke and odors released during initial operation.

- Open windows for air circulation.
- Leave room during initial operation.
- Smoke may set off smoke detectors.

Smoke and odors may be irritating to sensitive individuals.



WARNING

Fire Hazard.

Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the appliance's vicinity.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids in this appliance.
- · Combustible materials may ignite.

E. Frequently Asked Questions

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20 to 40 minutes.
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the appliance.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Is it normal to see the pilot flame burn continually?	In an Intellifire ignition system it is normal to see the pilot flame, but it should turn off when ON/OFF is turned off. In a standing pilot system the pilot will always stay on.

Troubleshooting

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician.

A. Standing Pilot Ignition System

Symptom	Possible Causes	Corrective Actions
1. After repeated triggering of the red or black piezo	a. Defective ignitor.	Check the spark at the electrode and pilot. If no spark and electrode wire is properly connected, replace the ignitor.
ignitor button, the spark ignitor will not light the pilot.	b. Defective pilot or misaligned electrode (spark at electrode).	Using match, light the pilot. If the pilot lights, turn off the pilot and trigger the red piezo ignitor button again. If the pilot lights, an improper gas/air mixture caused the bad lighting and a longer purge period is recommended. If the pilot will not light, ensure the gap at the electrode and pilot is one-eighth (1/8) inch to have a strong spark. If the gap is OK, replace the pilot.
	c. No gas or low gas pressure.	Check the remote shut-off valves from the fireplace. Usually, there is a valve near the gas main. There can be more than one (1) valve between the fireplace and the main.
	d. No LP in tank.	Check the LP (propane) tank. You may be out of fuel.
2. The pilot will not stay lit after care-	a. Defective ther- mocouple.	Check that the pilot flame impinges on the thermocouple. Clean and/or adjust the pilot for maximum flame impingement.
fully following the lighting instructions.		Ensure that the thermocouple connection at the gas valve is fully inserted and tight (hand tighten plus 1/4 turn).
		Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the tip of the thermocouple and the other meter lead wire on the thermocouple copper lead. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15mV, replace the thermocouple.
	b. Defective valve.	If the thermocouple is producing more than 15 millivolts, replace faulty valve.
3. The pilot is burning, there is no burner flame, the valve knob is in the ON position,	a. ON/OFF switch or wires defective.	Check the ON/OFF switch and wires for proper connections. Place the jumper wires across the terminals at the switch. If the burner comes on, replace the defective switch. If the switch is OK, place the jumper wires across the switch wires at the gas valve. If the burner comes on, the wires are faulty or connections are bad.
and the ON/OFF switch is in the ON position.	b. Thermopile may not be generating sufficient millivolt-	If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame.
	age.	Be sure the wire connections from the thermopile at the gas valve terminals are tight and that the thermopile is fully inserted into the pilot bracket.
		Check the thermopile with a millivolt meter. Take the reading at TH-TP&TP terminals of the gas valve. The meter should read 325 millivolts minimum, while holding the valve knob depressed in the pilot position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum.
		With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 325 millivolts minimum. Replace the thermopile if the reading is below the minimum.

Troubleshooting (continued)

Symptom	Possible Cause	Corrective Action
3Continued	c. Defective valve.	Turn the valve knob to the ON position. Place the ON/OFF switch in the ON position. Check the millivolt meter a the thermopile terminals. The millivolt meter should read greater than 125mV. If the reading is acceptable, and if the burner does not come on, replace the gas valve.
	d. Plugged burner orifice.	Check the burner orifice for stoppage. Remove stoppage.
	e. Wall switch or wires are defective.	Follow the corrective action in Symptom and Possible Cause 1.a above. Check the switch and wiring. Replace where defective.
4. Frequent pilot outage problem.	a. Pilot flame may be too high or too low, or blowing out (high pressure), causing pilot safety to drop out.	Clean thermocouple and adjust the pilot flame for maximum flame impingement. Follow lighting instructions carefully.
5. The pilot and main burner ex-	a. No LP in tank.	Check the LP (propane) tank. Refill the fuel tank.
tinguish while in operation.	b. Inner vent pipe leaking exhaust gases back into the system.	Check venting system for damage. Replace/repair improperly assembled pipe sections.
	c. Glass too loose and air tight packet leaks in corners after usage.	Replace glass panel assembly.
	d. Bad thermopile or thermocouple.	Replace if necessary.
	e. Improper vent cap installation.	Check for proper installation and freedom from debris or blockage.
6. Glass soots.	a. Flame impingement.	Adjust the log set so that the flame does not excessively impinge on it.
	b. Improper air shutter setting.	Adjust the air shutter located on the control panel.
	c. Debris around air shutter.	Inspect the opening at the base of the burner. NO MATERIAL SHOULD BE PLACED IN THIS OPENING.
7. Flame burns blue and lifts off burner.	a. Insufficient oxygen being supplied.	Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks.
		Ensure that no debris has been placed at the base of, or in the area of the air holes in the center of the base pan beneath the burner.
		Ensure that the glass is tightened properly on the unit, particularly on top corners.

B. Intellifire Ignition System

Symptom	Possible Causes	Corrective Actions
1. The ignitor/ module makes noise, but no spark. a. Incorrect wiring.		Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly. Reversed wires at the module may cause system to make sparking noise, but spark may not be present at pilot hood.
	b. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Rod closest to pilot hood is ignitor. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	c. Ignitor gap is too large.	Verify gap of igniter to pilot hood. The gap should be approximately .17 inch or 1/8 inch.
	d. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF Rocker switch or wall switch in ON position. Hold ground wire about 3/16 inch away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
2. Pilot won't light, there is no noise or spark.	a. Transformer installed correctly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
	b. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness.
	c. Improper wall switch wiring.	Verify that 110 VAC power is "ON" to junction box.
	d. Module not grounded.	Verify black ground wire from module wire harness is grounded firmly to metal chassis of appliance.
	e. Faulty mod- ule.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF Rocker switch or wall switch in ON position. Hold ground wire about 3/16 inch away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
3. Pilot lights but continues to spark, and main burner will	a. A shorted or loose connection in sensor rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	b. Poor flame rectification or contaminated sensor rod.	Verify that flame is engulfing sensor rod. If the pilot assembly does not have a ground strap, consider installing one to increase flame rectification. Verify correct pilot orifice is installed and inlet gas specifications. Flame carries rectification current, not the gas. If flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high an inlet pressure can cause pilot flame to lift. The sensor rod may be contaminated. Clean sensor rod with emery cloth.
	c. Module is not grounded.	Verify that module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to module.

Intellifire Ignition System - (continued)

Symptom	Possible Causes	Corrective Actions			
3continued	d. Damaged pilot assembly or dirty sensor rod.	Verify that ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify connection from sensor rod to white sensor wire. Clean sensor rod with emery cloth to remove any contaminants that may have accumulated on sensor rod. Verify continuity with a multimeter with ohms set at lowest range.			
	e. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF Rocker switch or wall switch in ON position. Hold ground wire about 3/16 inch away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.			
4. Pilot sparks, but Pilot will not light.	a. Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. W.C.			
	b. Ignitor gap is too large.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in.			
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.			
	d. Module voltage output / Valve/Pilot solenoid ohms readings.	Verify battery voltage is at least 2.7 volts. Replace batteries if voltage is below 2.7.			

15

Maintaining and Servicing Appliance

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up at the beginning of each heating season.

A WARNING

Risk of injury or property damage.

Before servicing:

- · Turn off gas.
- Turn off electricity to appliance.
- · Disable remote control, if one is present.
- · Ensure appliance is completely cooled.

After servicing:

- · Replace any screen or barrier that was removed.
- · Reseal and reinstall any venting removed for servicing.

A WARNING

Annual inspection by qualified technician recommended.

Check:

- · Condition of doors, surrounds and fronts.
- Condition of glass, glass assembly and glass seal.
- Obstructions of combustion and ventilation air.
- Condition of logs.
- · Condition of firebox.
- Burner ignition and operation.
- Burner air shutter adjustment
- Gas connections and fittings.
- Obstructions of termination cap.

Clean:

- Glass
- Air passageways, grilles, control compartment
- Burner, burner ports

Risk of:

- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors





CAUTION



Handle glass assembly with care.

NOTE: Clean glass after initial 3-4 hours operation. Longer operation without cleaning glass may cause a permanent white film on glass.

When cleaning glass door:

- · Avoid striking, scratching or slamming glass.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when hot.
- Turn off appliance after 3-4 hours of operation and ALLOW TO COOL.
- · Remove and clean glass assembly.
- Replace glass assembly and operate appliance for additional 12 hours.

Refer to maintenance instructions.



WARNING



- Inspect external vent cap regularly.
- Ensure no debris blocks cap.
- · Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.

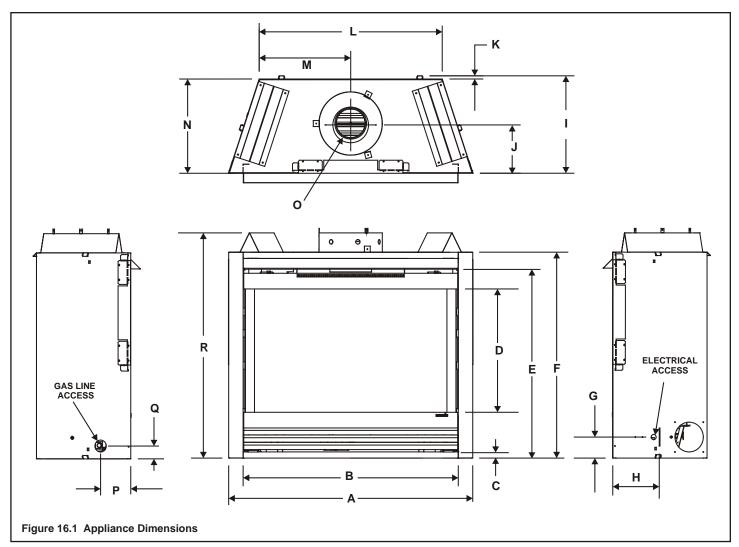
Inspect	Maintenance Tasks						
Doors, Surrounds and	1. Assess condition of screen and replace as necessary. Recommend addition of screen if one is not						
Fronts	present. 2. Inspect for scretches, depts or other damage and repair as necessary.						
	Inspect for scratches, dents or other damage and repair as necessary. Varify no electrustical to circles the legislatures.						
	3. Verify no obstructions to airflow through the louvers.						
	4. Verify maintenance of proper clearance to combustible household objects.						
Gasket Seal, Glass Assembly and Glass	Inspect gasket seal and its condition.						
Sembly and Glass	2. Inspect glass panels for scratches and nicks that can lead to breakage when exposed to heat.						
	3. Confirm there is no damage to glass or glass frame. Replace as necessary.						
	4. Verify that latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary.						
	5. Clean glass. Replace glass assembly if severely coated with silicate deposits that cannot be removed.						
Valve Compartment and Firebox Top	Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.						
·	2. Remove any foreign objects.						
	3. Verify unobstructed air circulation.						
Logs	Inspect for broken, damaged, or missing logs. Replace as necessary.						
	2. Verify correct log placement and no flame impingement causing sooting. Correct as necessary.						
Firebox	Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary.						
	2. Replace appliance if firebox has been perforated.						
Burner Ignition and	Verify burner is properly secured and aligned with pilot or igniter.						
Operation	2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.						
	3. Replace ember materials with new dime-size and shape pieces. Do not block ports or obstruct lighting paths.						
	4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay.						
	5. Inspect for lifting or other flame problems.						
	6. Verify air shutter is clear of dust and debris.						
	7. Inspect orifice for soot, dirt or corrosion.						
	8. Verify manifold and inlet pressures. Adjust regulator as required.						
	9. Inspect pilot flame strength. Clean or replace orifice as necessary.						
	10. Inspect thermocouple/thermopile or IPI sensor rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.						
	11. Verify millivolt output. Replace as necessary.						
Venting	Inspect venting for blockage or obstruction such as bird nests, leaves, etc.						
	2. Confirm that termination cap remains clear and unobstructed by plants, etc.						
	3. Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained.						
	4. Inspect for corrosion or separation.						
	5. Verify weather stripping, sealing and flashing remains intact.						
	6. Inspect draft shield to verify it is not bent, damaged or missing.						
Remote controls	1. Verify operation of remote.						
	2. Replace batteries in remote transmitters and battery-powered receivers.						
	3. Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.						

16 Ref

Reference Materials

A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to **Section 3**.



Appliance Dimensions Table

		Α	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0	Р	Q	R
OL SECTION	Inches	36	31	32-1/2	17	28-1/2	31	8	15-3/4	25-3/4	1/2	1/2	8-1/8	16-1/4	5	5-1/16	2-1/4	1	28-1/2
SL-550TV-D	Millimeters	913	790	827	438	723	789	198	402	327	653	14	206	415	127	129	55	25	726
CL ZEOTY D	Inches	41	36	37-3/4	20-1/2	32	34-1/2	8	-	15-3/8	30-3/4	-	-	-	5	-	-	-	32
SL-750TV-D	Millimeters	1040	917	960	526	810	878	198	-	390	780	-	-	-	127	-	-	-	815
CL OFOTY D	Inches	48	43	41-3/4	22	-	38-1/2	-	-	18-7/8	37-3/4	-	-	-	6	6	-	-	36
SL-950TV-D	Millimeters	1218	1095	1062	559	-	979	-	-	479	958	-	-	-	153	153	-	-	917

LIMITED LIFETIME WARRANTY HEAT & GLO GAS APPLIANCE PRODUCTS



Where everything comes together

BASIC ONE-YEAR WARRANTY. HEAT & GLO, a brand of HEARTH & HOME TECHNOLOGIES INC., located at 20802 Kensington Boulevard, Lakeville, MN 55044, ("HEAT & GLO") warrants to the original owner that your new HEAT & GLO Gas Appliance (the "Product") will be free from defects in materials and workmanship for a period of one year from the date of installation. During the first year, HEAT & GLO will replace or repair, at its discretion, any defective components at its sole cost and expense, including payment of all reasonable labor costs incurred in replacing or repairing such components. This basic warranty is subject to the conditions, exclusions and limitations described below.

EXTENDED LIFETIME COVERAGE. HEAT & GLO warrants that the firebox, heat exchanger, log(s), and burner will not be defective in material or workmanship during the period the Product is owned by the original owner, subject to the following conditions, exclusions and limitations described below.

CONDITIONS, EXCLUSIONS AND LIMITATIONS:

- 1. This warranty applies to the original owner only and is nontransferable.
- 2. This warranty applies only to Products installed in the United States of America or Canada.
- 3. This warranty is limited to the replacement or repair of defective components or workmanship and HEAT & GLO may fully discharge all obligations under this warranty by repairing or replacing, at its discretion, the defective components. The maximum amount recoverable under this warranty is limited to the purchase price of the Product and, if HEAT & GLO is unable to provide replacement or repair in an expedient and cost-effective manner, HEAT & GLO may discharge all obligations under this warranty by refunding the purchase price of the Product. IN NO EVENT SHALL HEAT & GLO BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY DEFECTS IN THE PRODUCT.
- 4. Any labor and related repair charges relating to the costs and expenses of replacing or repairing defective components under the Limited Lifetime Warranty are not covered by this warranty, except as provided for under the Basic One-Year Warranty.
- 5. Components and parts made by other manufacturers, whether sold with the Product or added thereafter, are NOT covered by this warranty unless expressly authorized and approved by HEAT & GLO in writing.
- 6. Any damages caused by environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other such causes are not covered by this warranty.
- 7. This warranty will be void if:
 - a) The Product is not installed, operated and maintained in compliance with local building codes and with the instructions in the Installer's Guide, Owner's Guide and Listing Agent Identification Label furnished with the Product.
 - b) Any parts or components made by other manufacturers are added or used in the Product, unless expressly authorized and approved by HEAT & GLO in writing.
 - c) Any service work is performed on the Product by anyone other than an authorized HEAT & GLO representative.
 - d) The Product is damaged due to shipping, improper handling, accident, abuse or misuse.
 - e) Fuels other than those specified in the Installer's Guide and Owner's Guide are used.
 - f) Modification was made to the Product which was not expressly authorized and approved by HEAT & GLO in writing.

EXCEPT TO THE EXTENT PROVIDED BY LAW, HEAT & GLO MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO THE DURATION OF THE WARRANTY SPECIFIED ABOVE.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow exclusion or limitation of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

If warranty service is needed you should contact your installing dealer and if the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HEAT & GLO dealer or supplier.

NOTES TO CUSTOMER:

1.	In order to insure proper installation, operation and maintenance HEAT & GLO strongly recommends annual
	servicing by an authorized HEAT & GLO dealer.

2.	Please complete this information	and retain this warranty in a	safe place for future reference: Installation Date:
	Model #:	Serial #:	Installing Contractor:

3. HEAT & GLO reserves the right to make changes at any time, without notice, in design, material, specifications and prices of the Product. HEAT & GLO also reserves the right to discontinue styles and products.

© 2005 Hearth & Home Technologies Inc.

060-981D 3/05

D. Contact Information



Where everything comes together

Heat & Glo, a brand of Hearth & Home Technologies Inc. 20802 Kensington Boulevard, Lakeville, MN 55044 www.heatnglo.com

Please contact your Heat & Glo dealer with any questions or concerns.

For the location of your nearest Heat & Glo dealer,

please visit www.heatnglo.com

- NOTES -					

CAUTION DO NOT DISCARD THIS MANUAL



- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

Printed in U.S.A. - Copyright 2006