



HEARTH PRODUCTS

P/N 875020M Rev. G 01/2013

This manual is one of a set of two supporting this product. Refer to P/N 850016M for Installation Instructions. Ce manuel est disponible en français, simplement en faire la demande. Numéro de la pièce 875020CF.

CARE AND OPERATION INSTRUCTIONS

DIRECT VENT SPECTRA SERIES



MODELS

LSS-35CN
LSS-35CP

LSS-40CN
LSS-40CP

WHAT'S INSIDE

Table of Contents 2
Safety and Your Fireplace 2
FREE Safety Guard Offer (Protects Against Burns) 2
Important Safety Information 4
Attaching the Safety-in-Operation Warnings 5
[EN FRANÇAIS] L'information de sûreté importante 3-4
Apposition des mises en garde relatives à la sécurité d'utilisation 5
[EN ESPAÑOL] Información importante de seguridad 3-4
Colocación de advertencias de seguridad en operación 5



OTL Report No. 116-F-02b-5



INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.
INSTALLATEUR : Laissez cette notice avec l'appareil.
CONSOMMATEUR : Conservez cette notice pour consultation ultérieure.



WARNING / AVERTISSEMENT / AVISO

- HOT GLASS WILL CAUSE BURNS.
DO NOT TOUCH GLASS UNTIL COOLED.
NEVER ALLOW CHILDREN TO TOUCH GLASS.



- UNE SURFACE VITRÉE CHAUDE PEUT CAUSER DES BRÛLURES.
LAISSER REFROIDIR LA SURFACE VITRÉE AVANT D'Y TOUCHER.
NE PERMETTEZ JAMAIS À UN ENFANT DE TOUCHER LA SURFACE VITRÉE.

- EL VIDRIO CALIENTE CAUSARÁ QUEMADURAS.
USTED DEBE NUNCA TOCAR EL VIDRIO CALIENTE.
LOS NIÑOS DEBEN NUNCA TOCAR EL VIDRIO.

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.

AVERTISSEMENT : Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

- Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ :
• Ne pas tenter d'allumer d'appareil.
• Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
• Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
• Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

Thank you for your purchase. We appreciate your business!

Please carefully read and follow all instructions in this manual.  
**Pay special attention to all warnings and safety information.**

Following these safety, care, and operation instructions will help ensure many years of dependable and enjoyable service from your fireplace.

## • FREE SAFETY GUARD OFFER •

*The Lennox® SAFETY GUARD protects against severe burns and injuries by preventing direct contact with the front glass surface of your fireplace.*

To receive your FREE **SAFETY GUARD**, call **1-800-786-7976** or visit **www.lennox.com** (Lennox Hearth Products / Owner Resources)

## Table of Contents

<b>Safety and Your Fireplace</b> .....	<b>2</b>
<b>Important Safety Information</b> .....	<b>4</b>
<b>Attaching the Safety-in-Operation Warnings</b> .....	<b>5</b>
General Information .....	6
Operation/Care of Your Appliance .....	8
Gas Controls Access .....	8
Remote Control System .....	8
Maintenance .....	11
Front Glass Enclosure Panel, Removal and Installation .....	12
Install Volcanic Stone, Embers and Logs .....	12
Burner Flame Appearance/Sooting .....	17
Burner Flame Adjustments .....	18
Appliance Checkout .....	18
Warranty .....	19
Replacement Parts .....	19
Wiring Diagram .....	19
Product Reference Information .....	20
Accessory Components .....	20
Lighting Instructions .....	22
Maintenance Schedule .....	24
Troubleshooting Guide .....	25
Replacement Parts List .....	26



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

# Safety and Your Fireplace

## All parts of your Lennox Hearth Products fireplace get EXTREMELY HOT!

- To prevent severe burns and injuries, install a screen or physical barrier to prevent direct contact with the glass.

*To order a FREE Lennox® SAFETY GUARD for your fireplace, see details at left.*

- Follow the safety instructions below and be sure everyone in your household understands this burn hazard:

- **The surfaces on your fireplace get EXTREMELY HOT!**

- **The glass on the front of the fireplace reaches EXTREMELY HIGH temperatures and can cause severe burns if touched.**



- **Keep children away from an operating fireplace. Closely supervise children in any room where a fireplace is operating to prevent contact with glass.**

- **Keep clothing, furniture, gasoline, and other flammable liquids away from the fireplace.**



- **Even after the gas is turned off, fireplace surfaces remain extremely hot.**

- Be sure to attach the enclosed **Safety-in-Operation Warnings** where you turn on your fireplace, to help remind everyone of the dangers associated with high temperatures (see page 5).

- Read **Important Safety Information** on page 4.

[FRENCH]

## ***La sécurité et votre foyer***

**Toutes les parties de votre foyer  
Lennox Hearth Products deviennent  
EXTRÊMEMENT CHAUDES !**

- Afin d'éviter de vous brûler gravement ou de vous blesser, installez une grille ou une barrière physique pour empêcher tout contact direct avec la vitre.

***Pour commander un PANNEAU DE PROTECTION  
Lennox® GRATUIT pour votre foyer, consultez  
les détails dans la partie gauche.***

- Suivez les instructions de sécurité ci-dessous et veillez à ce que tous les membres de votre famille soient conscients du danger de brûlure encouru :
  - **Les surfaces de votre foyer deviennent EXTRÊMEMENT CHAUDES !**
  - **La vitre située à l'avant du foyer atteint des températures EXTRÊMEMENT ÉLEVÉES et peut causer de graves blessures en cas de contact.**
  - **Tenez les enfants à l'écart du foyer lorsqu'il fonctionne. Surveillez attentivement les enfants dans les pièces où un foyer est utilisé afin d'éviter qu'ils ne soient en contact avec la vitre.**
  - **Tenez tous les vêtements, les meubles, l'essence et tout autre liquide inflammable à l'écart du foyer.**
  - **Même après fermeture du gaz, les surfaces du foyer restent extrêmement chaudes.**
- Veillez à coller les **Étiquettes de mise en garde relatives à la sécurité d'utilisation** à l'endroit où vous utilisez le foyer, pour rappeler à tous les utilisateurs les dangers liés aux températures élevées (**voir page 5**).
- Lisez la section **Informations importantes relatives à la sécurité, page 4.**



[SPANISH]

## ***Seguridad y su chimenea***

**¡Todas las partes de la chimenea  
Lennox Hearth Products se ponen  
MUY CALIENTES!**

- Instale una malla o barrera física para evitar el contacto directo con el vidrio y prevenir las quemaduras y lesiones graves.

***Ver los detalles a la izquierda para ordenar  
un Lennox® SAFETY GUARD GRATIS  
para su chimenea.***

- Siga las instrucciones de seguridad a continuación y asegúrese de que todos en su hogar sepan acerca de este peligro de quemadura:
  - **¡Las superficies de la chimenea se ponen MUY CALIENTES!**
  - **El vidrio delante de la chimenea alcanza temperaturas EXTREMADAMENTE ALTAS y puede causar quemaduras graves si se toca.**
  - **Mantenga a los niños alejados de la chimenea en funcionamiento. Supervise en forma cercana a los niños en cualquier cuarto donde haya una chimenea funcionando para impedir el contacto con el vidrio.**
  - **Mantenga la ropa, mobiliario, gasolina y otros líquidos inflamables alejados de la chimenea.**
  - **Aún después de haber apagado el gas, las superficies de la chimenea permanecen extremadamente calientes.**
- Asegúrese de colocar las **Etiquetas de advertencia de seguridad de operación** en el lugar donde enciende la chimenea, para que todos recuerden los peligros asociados con las altas temperaturas (**ver la página 5**).
- Lea la **Información importante** de seguridad en la **página 4.**

## Important Safety Information

1. **WARNING:** Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person .
2. 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.
3. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
4. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
5. Clothing or other flammable material should not be placed on or near the appliance.
6. Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.
7. Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.
8. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. See maintenance instructions on page 10.

## L'information de sûreté importante

1. **AVERTISSEMENT.** Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé. Confiez le remplacement du panneau à un technicien agréé
2. Ne pas utiliser cet appareil s'il a été plongé, même partiellement, dans l'eau. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de commande et toute commande qui a été plongée dans l'eau.
3. En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures.
4. Les enfants et les adultes devraient être informés des dangers que posent les températures de surface élevées et se tenir à distance afin d'éviter des brûlures ou que leurs vêtements ne s'enflamment.
5. On ne devrait pas placer de vêtements ni d'autres matières inflammables sur l'appareil ni à proximité.
6. Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité ; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.
7. Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.
8. L'installation et la réparation devrait être confiées à un technicien qualifié. L'appareil devrait faire l'objet d'une inspection par un technicien professionnel avant d'être utilisé et au moins une fois l'an par la suite. Des nettoyages plus fréquents peuvent être nécessaires si les tapis, la literie, et cetera produisent une quantité importante de poussière. Il est essentiel que les compartiments abritant les commandes, les brûleurs et les conduits de circulation d'air de l'appareil soient tenus propres. Voyez les instructions d'entretien à la page 10.

[SPANISH]

## Información importante de seguridad

1. **ADVERTENCIA:** No opere el artefacto con el frente de vidrio quitado, agrietado o roto. Un técnico de servicio licenciado o capacitado debe reemplazar el vidrio.
2. No use este artefacto si alguna de sus partes ha estado bajo agua. Llame de inmediato a un técnico de servicio calificado para que inspeccione el artefacto y reemplace cualquier parte del sistema de control y cualquier control de gas que haya estado bajo agua.
3. Debido a las altas temperaturas, el artefacto debe situarse fuera de las áreas de tráfico y lejos del mobiliario y cortinas.
4. Se debe alertar a los niños y adultos sobre los peligros de las altas temperaturas en la superficie y que se mantengan alejados para evitar quemaduras o ignición de la ropa.
5. No debe colocarse ropa u otros materiales inflamables sobre y cerca del artefacto.

6. Se debe supervisar de cerca a los niños cuando estén en el mismo cuarto que el artefacto. Los niños pequeños, los jóvenes y otras personas pueden ser susceptibles a quemaduras por contacto accidental. Se recomienda instalar una barrera física si hay personas en riesgo en la casa. Para restringir el acceso a una chimenea o estufa, instale una puerta de seguridad ajustable para mantener a los niños pequeños, jóvenes y otras personas en riesgo fuera del cuarto y lejos de las superficies calientes.
7. Cualquier malla o resguardo de seguridad quitado para dar servicio a un artefacto, debe reinstalarse antes de operar el artefacto.
8. Una persona de servicio competente debe realizar la instalación y reparación. Una persona de servicio profesional debe inspeccionar el artefacto antes de usar al menos una vez por año. Se puede requerir limpieza más frecuente debido a la pelusa excesiva del alfombrado, del material de cobijas, etc. Es imprescindible mantener limpios los compartimentos de control, los quemadores y los pasajes de circulación del aire del artefacto. Ver las instrucciones de mantenimiento en la página 10.

## HOMEOWNER'S INSTRUCTIONS - ATTACHING SAFETY-IN-OPERATION WARNINGS

### ATTACHING SAFETY-IN-OPERATION WARNINGS

Your fireplace has been furnished with safety instruction labels that are to be affixed to the operation and control points of the fireplace. A safety instruction label should be affixed to the receiver wall switch plate where the fireplace is turned on and off (See **Figure A**) and the remote control handheld transmitter (**Figure B**). The warnings should already have been put in place when the fireplace initial set-up was completed. If they are not affixed at these spots, locate the multi-lingual adhesive labels provided with these instructions and proceed as follows:

1. Locate the wall receiver that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall receiver plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall receiver that controls the fireplace (**Figure A**). Choose the language primarily spoken in the home.
2. Locate the remote control transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (**Figure B**). Choose the language primarily spoken in the home.
3. If you are unable to locate the labels, please call Lennox Hearth Products or your nearest Lennox Hearth Products dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

**LENNOX HEARTH PRODUCTS**  
1-800-9-LENNOX

*Note: English is red text on clear label. French and Spanish are white text on black label.*

### SAFETY LABEL DIAGRAMS



**Figure A**



### APPOSITION DES MISES EN GARDE RELATIVES À LA SÉCURITÉ D'UTILISATION

Votre foyer a été livré avec des étiquettes de sécurité qui doivent être collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité devrait être collée sur la plaque du récepteur mural contrôlant l'allumage du foyer (voir **Figure A**) et sur le boîtier de la télécommande (**Figure B**). Les mises en garde auraient dû être collées au moment de l'installation initiale du foyer. Si ce n'est pas le cas, prenez les étiquettes adhésives multilingues fournies avec ces instructions et procédez comme suit:

1. Repérez le récepteur mural qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque du récepteur mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque du récepteur mural qui contrôle le foyer (**Figure A**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
2. Repérez la télécommande et nettoyez-la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande (**Figure B**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
3. Si vous ne trouvez pas les étiquettes, veuillez appeler Lennox Hearth Products ou votre distributeur Lennox Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

Étiquettes de remplacement, n° cat. H8024

**LENNOX HEARTH PRODUCTS**  
1-800-9-LENNOX

*Remarque: Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.*

### DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



**Figure B**



### COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Su chimenea incluye etiquetas de instrucciones de seguridad que deben colocarse en los puntos de operación y control de la chimenea. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared del receptor desde el cual se enciende y se apaga la chimenea (ver la **Figura A**) y en el transmisor de control remoto (**Figura B**). Las advertencias ya deben haberse colocado cuando se completó la instalación inicial de la chimenea. Si no están colocadas en estos lugares, encuentre las etiquetas adhesivas multilingües proporcionadas con estas instrucciones y prosiga de la siguiente manera:

1. Identifique el receptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del receptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del receptor de pared que controla la chimenea (**Figura A**). Seleccione el idioma que más se habla en la casa.
2. Identifique el transmisor de control remoto y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (**Figura B**). Seleccione el idioma que más se habla en la casa.
3. Si no puede encontrar las etiquetas, sírvase llamar a Lennox Hearth Products o al distribuidor de Lennox Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

Juego de etiquetas de repuesto - N° de cat. H8024

**LENNOX HEARTH PRODUCTS**  
1-800-9-LENNOX

*Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.*

### DIAGRAMAS DE ETIQUETAS DE SEGURIDAD



## General Information

The fireplace models covered in this manual are direct-vent sealed combustion gas fireplace heaters designed for residential application. These direct-vent appliances operate with the combustion chamber completely isolated from the indoor environment.

All air for combustion is brought in from the outside and exhaust gases are vented through the same direct-vent, co-axial (intake/exhaust) vent system.

These appliances are designed to operate on natural or propane gas. An electronic intermittent pilot ignition system provides safe, efficient operation. External electrical power is recommended to operate these units. If the system operates on line voltage with 6V fan control module, four (4) "AA" batteries can be used as a backup in case of a power outage. The electronic appliance can be operated solely with four (4) "AA" batteries.

These appliances comply with National Safety Standards and are tested and listed by OMNI-Test Laboratories, Inc. (Report No. 116-F-02b-5) to ANSI Z21.88-2009/CSA 2.33-2009, and CGA-2.17-M91 (R2009) in both USA and Canada, as vented gas fireplace heaters.

The Installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54-latest edition, or the Natural Gas and Propane Installation Code, CAN/CSA B149.1-latest edition. The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the latest edition of the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1 - latest editions.

**The vent termination is hot while in operation and for a period of time following the use of the fireplace. To prevent contact with hot surfaces, we recommend the use of a termination guard. See Page 19 for ordering information.**

**These fireplaces are designed as supplemental heaters. Therefore, it is advisable to have an alternate primary heat source when installed in a dwelling.**

**These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.**

## INSTALLATION, SERVICE, AND MAINTENANCE

**IMPORTANT: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual.**

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

**Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.**

**Draft relief openings must not be covered or blocked.**

**These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.**

Any change to this appliance and/or its operating controls is dangerous.

**Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.**

**Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Turn off the gas supply to the appliance and have it serviced by a qualified professional, as it may not be operating correctly.** Some people are more affected by carbon monoxide than others, including pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

**Turn off gas and electrical power to the fireplace and allow it to cool before cleaning or servicing the appliance.**

## OPERATION

**Do not operate appliance with the glass front removed, cracked, or broken.**

These fireplaces are vented gas appliances. **Do not burn wood or other material in these appliances.**

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

This appliance is not convertible for use with other gases, unless a certified kit is used.

**These appliances are designed to operate on natural gas or propane gas only.** The use of other fuels or combinations of fuels will degrade the performance of this system and may be dangerous.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. **Never obstruct the front openings of the appliance.**

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

## WARRANTY

**Failure to comply with the installation and operating instructions provided will result in an improperly installed and operating appliance, voiding its warranty.**

Do not attempt to alter or modify the construction of the appliance or its components. **Any modification or alteration may void the warranty, certification, and listings of this unit.**

## BTU Input

Electronic models come standard with a remote controlled modulating gas valve; flame appearance and heat output can be varied. The BTU Input for these appliances are shown in **Table 1**.

Model	Fuel	Maximum Input (BTU/hr)	Minimum Input (BTU/hr)
LSS-35CN	Natural Gas	33,000	23,500
LSS-35CP	Propane	30,000	23,500
LSS-40CN	Natural Gas	41,500	28,400
LSS-40CP	Propane	37,000	30,700

**Table 1**

## Gas Pressure

**Tables 2 and 3** show the appliances' gas pressure requirements.

Inlet Gas Supply Pressure (all models)		
Fuel #	Minimum	Maximum
Natural Gas	4.5" WC (1.12 kPa)	10.5" WC (2.61 kPa)
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.23 kPa)

**Table 2**

Manifold Gas Supply Pressure (all models)		
Fuel #	Low	High
Natural Gas	(Lo) 1.6" WC (0.40 kPa)	(Hi) 3.5" WC (0.87 kPa)
Propane	(Lo) 6.3" WC (1.57 kPa)	(Hi) 10.0" WC (2.49 kPa)

**Table 3**

Test gauge connections are provided on the front of the gas control valve, identified IN for the inlet and OUT for the manifold side (see **Figure 1**). A 1/8" NPT Test gauge connection is provided at the inlet and outlet (manifold) ports.

These appliances must be isolated from the gas supply piping system (by closing their individual manual shut-off valve) during any pressure testing of the gas supply piping system at test pressures equal to or **less than** 1/2 psig (3.5 kPa).

These appliances and their individual shut-off valves must be disconnected from the gas supply piping system during any pressure testing of that system at pressures **greater than** 1/2 psig (3.5 kPa).

## Orifice Sizes - Sea Level to High Altitude

**(All Models):** These appliances are tested and approved for installations at elevations of 0-4500 feet (0-1372 meters) above sea level using the standard burner orifice sizes (marked with an "\*" in **Table 4**).

For higher elevations, contact your gas supplier or qualified service technician.

Burner Orifice Sizes Elevation 0-4500 feet ( 0-1372 meters)		
Model Series	Nat. Gas drill size (inches)	Propane drill size (inches)
LSS-35 Rear Burner	#44 (0.086")* 60J80•	#55 (0.052")* 19L52•
LSS-35 Front Burner	#50 (0.070")* H4873•	#61 (0.039")* 35M91•
LSS-40 Rear Burner	#42 (0.094")* H3721•	(0.054")* 88J59•
LSS-40 Front Burner	#45 (0.082")* 39L66•	#56 (0.047")* 62L37•

**Table 4**

\* Standard size installed at factory  
• Part /Cat. Number

The appliance must have been installed according to the regulations of the local authorities having jurisdiction and, in the USA, the National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition or, in Canada, the CAN/CSA-B149.1- latest edition.

## Deration -

At higher elevations, the amount of BTU fuel value delivered must be reduced by either using gas that has been derated by the gas company or by changing the burner orifice to a smaller size as regulated by the local authorities having jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition or, in Canada, the CAN/CSA-B149.1 - latest edition.

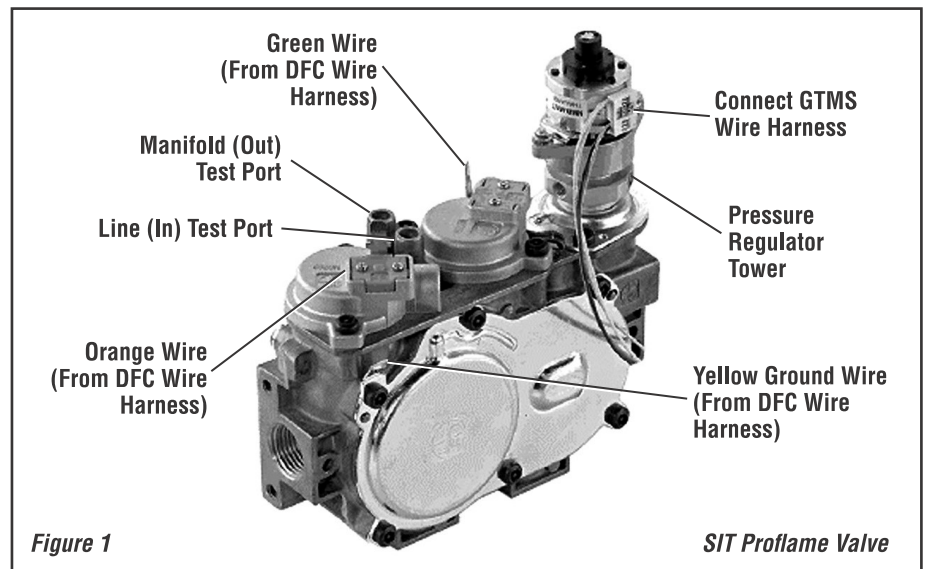
## Burn-in Period

During the first few fires of this appliance there will be some odor due to the curing of the paint and burning off of lubricants used in the manufacturing process. Depending on your use, the burn-in period may take a few hours or a few days.

**KEEP YOUR HOUSE WELL VENTILATED DURING THE CURING PROCESS. THE ODOR AND HAZE EMITTED DURING THE CURING PROCESS CAN BE QUITE NOTICEABLE AND MAY SET OFF A SMOKE DETECTOR. IT IS RECOMMENDED THAT THE BLOWER NOT BE OPERATED DURING THE BURN IN PERIOD.**

If an optional blower is installed, Do Not turn it on during the Burn-In period.

A white film may develop on the glass front during the first few fires as part of the curing process. The glass should be kept clean during the first two weeks of use to prevent the film from baking on (making it very difficult to remove). See **Cleaning Glass** on **Page 11**.



**Figure 1**

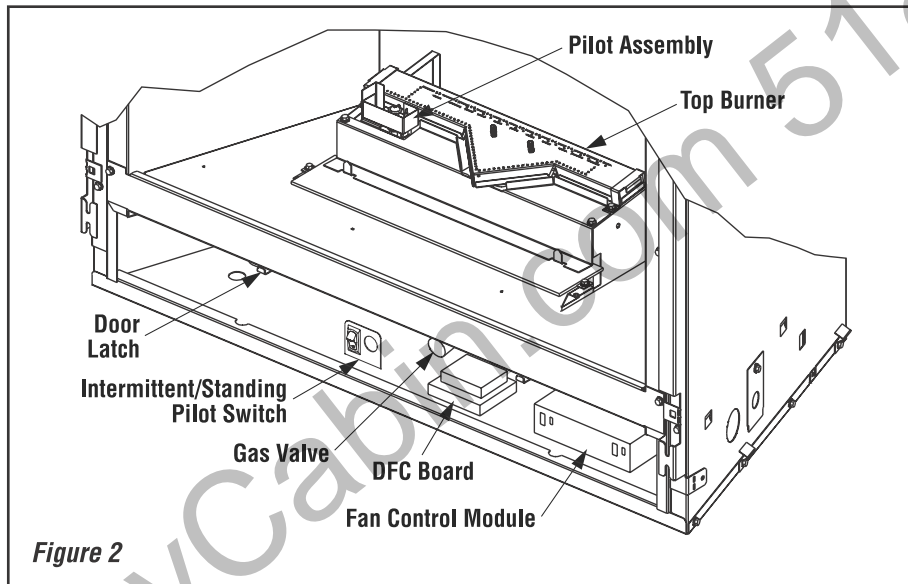
**SIT Proflame Valve**

**! WARNING**

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.

**! AVERTISSEMENT**

Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.



**Gas Controls/Control Compartment Access**

The gas control valve can be found in the control compartment.

**Accessing Control Compartment:**

Once the cast iron facade is installed, access to the lower control compartment can be accomplished by grasping the lower cast iron grill assembly and lifting it up and forward to disengage it from its mount. When the facade is not in place, there is no obstruction to access of the lower control compartment.

**Remote Control System**

The Remote and Receiver allows you to command the functions of your fireplace from the comfort of your chair and is configured to control the On/Off primary burner operation, its flame levels (through six levels) and provides On/Off and Smart thermostatic control.

The system controls fan speed through six (6) levels and has a constantly powered 110V/60Hz power outlet.

The Receiver connects directly to the gas valve, stepper motor and the Fan Control Module with an umbilical cord wiring harness (see Wire Diagram on page 19).

The Receiver is powered by 4 AA type batteries, located within.

The Receiver accepts commands via radio frequency from the Transmitter and does not require line-of-sight operation.

The Receiver three position slider switch can be set to one of three positions: ON (Manual Override), REMOTE (Remote Control) or OFF.

**Initializing The System For The First Time**

Install the 4 AA batteries into the receiver battery bay (behind the wall switch plate).

**Note:** The polarity of the battery and insert into the battery bay as indicated on the Battery cover (+/-).

Place the 3 position slider switch in the "Remote" position (see Figure 3). Using the end of a paper clip, or other similar object, insert the end of the paper clip into the hole marked "PRG" on the Receiver front cover. The Receiver will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter.

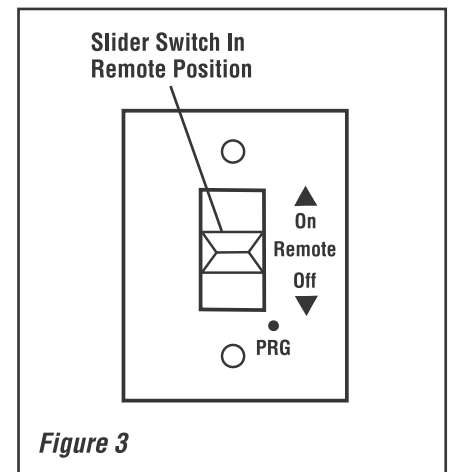
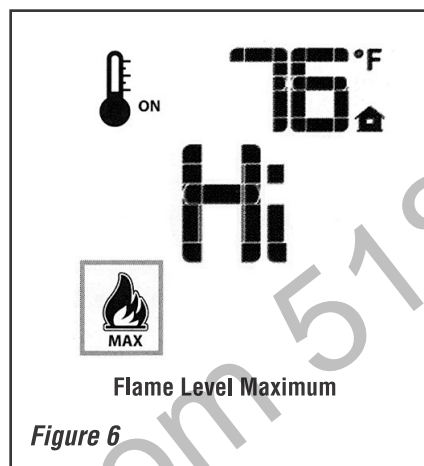
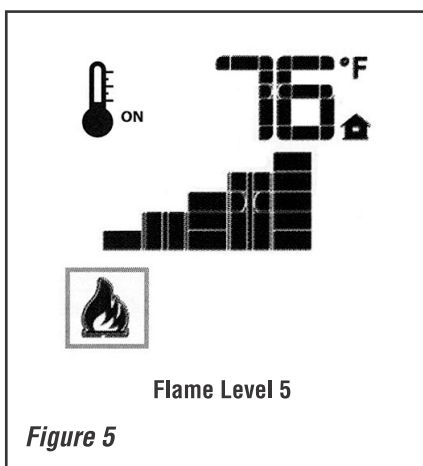
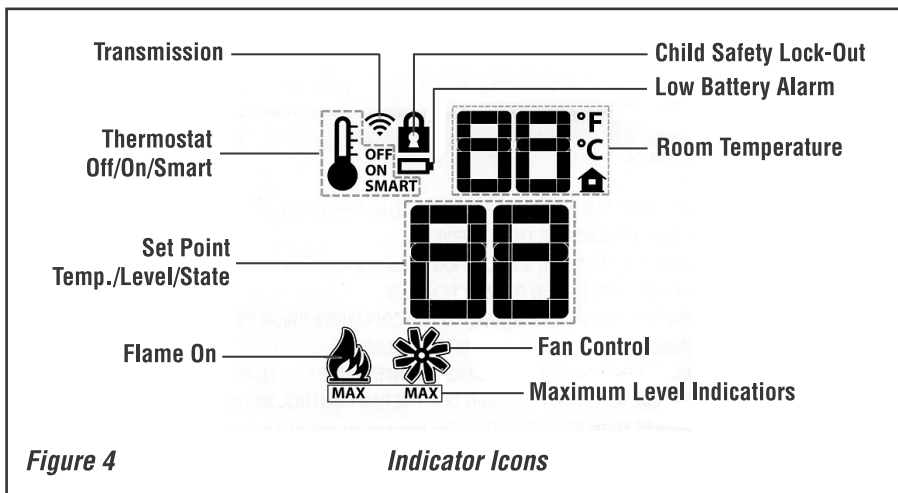


Figure 3





Install the 3 AAA type batteries in the Transmitter battery bay, located on the base of the Transmitter. With the batteries already installed in the Transmitter, push the ON button. The Receiver will "beep" four times to indicate the Transmitter's command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

#### Low Battery Power Detection

The life span of the Receiver batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc.

When the Receiver batteries are low, two "beeps" will be emitted from the Receiver when it receives and ON/OFF command from the Transmitter.

This is an alert for a low battery condition for the Receiver. When the batteries are replaced the "beep" will be emitted from the Receiver when the ON/OFF key is pressed (See Initializing The System)

**! WARNING**

**Fire hazard. Can cause severe injury or death. The receiver causes ignition of the appliance. The appliance can turn on suddenly. Keep away from the appliance burner when operating the remote system or activating manual bypass of the remote system.**

**! CAUTION**

**Property damage hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children can not reach it.**

#### Temperature Indicator Display

With the system in the "OFF" position, press the Thermostat Key and the Mode Key at the same time (see Figure 7). Look at the LCD screen on the Transmitter to verify that a C or F is visible to the right of the Room Temperature display (see Figure 4).

#### Turn On The Appliance

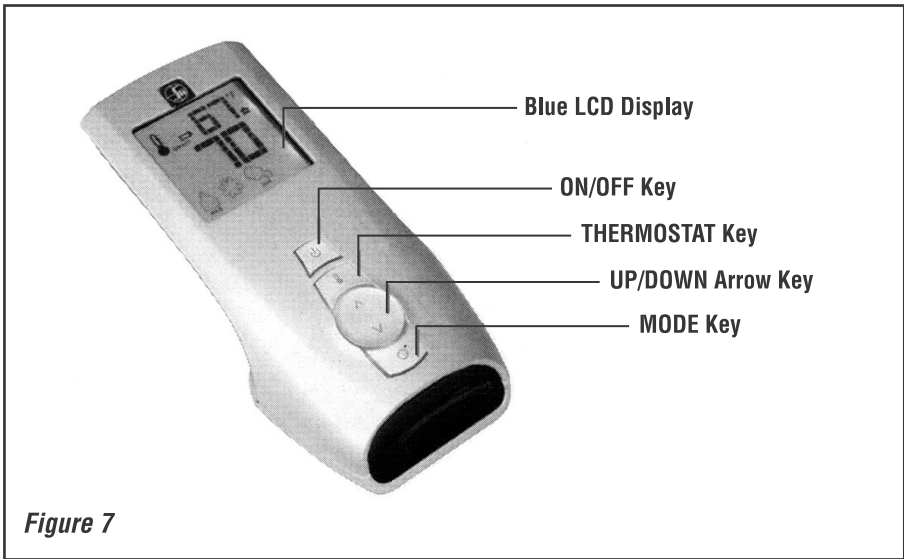
Press the ON/OFF Key on the Transmitter. The Transmitter display will show all active Icons on the screen. At the same time, the Receiver connects the thermopile to the gas valve millivolt coil and the appliance main burner turns on. A single "beep" from the Receiver will confirm reception of the command.

#### Turn Off The Appliance

Press the ON/OFF Key on the Transmitter. The Transmitter LCD display will only show the room temperature and Icon. At the same time, the Receiver disconnects the thermopile from the gas valve millivolt coil and the appliance burner turns off. A single "beep" from the Receiver confirms reception of the command.

#### Remote Flame Control

The system has six (6) flame levels. See Figure 5 for an example. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off.



**Figure 7**

The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position (see **Figure 6**). A single "beep" will confirm reception of the command.

**Room Thermostat (Transmitter Operation)**

The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room.

To activate this function, press the Thermostat Key. The LCD display on the Transmitter will change to show that the room temperature is "ON" and the set temperature is now displayed (see **Figure 7**). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

**Smart Thermostat (Transmitter Operation)**

The smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point, the Smart Function will modulate the flame down.

To activate this function, press the Thermostat Key until the word "SMART" appears to the right of the temperature bulb graphic. To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter (see **Figure 7**).

**Fan Speed Control**

This appliance is equipped with a hot air circulating fan. The speed of the fan is controlled by the Remote. The fan speed can be adjusted through six (6) speeds.

To activate this function use the Mode Key to index to the fan control icon (see **Figure 4**). Use the Up/Down Arrow keys to turn on, off or adjust the fan speed. A single "beep" will confirm reception of the command.

**Note:** The fan can be controlled only by the remote. Turning the fireplace off with the wall mounted three position slider switch will NOT turn off the fan. To turn off the fan, use the remote in lieu of or prior to shutting the fireplace off at the wall.

Fan speed will be indicated by either an Off, Level Bar, or HI shown in the Set Point/Temp/Level/State indicator area.

**Key Lock**

This function will lock the keys to avoid unsupervised operation. To activate this function, press the MODE and UP keys at the same time. To de-activate this function, press MODE and UP Keys at the same time.

**Intermittent/Standing Pilot Mode**

This fireplace can be switched from intermittent ignition to a standing pilot simply by toggling the switch located in the lower control compartment (refer to **Figure 2**). To save energy, switch to intermittent mode. To have a standing pilot which will help startup in the winter by warming the flue and the glass, switch to standing pilot.

The standing pilot mode is indicated by a pilot that comes on and remains lit when the fireplace is off.

**Manual Bypass Of The Remote System**

If the batteries of the Receiver or Transmitter are low or depleted, the appliance can be turned on manually by sliding the three position slider switch to the ON position. This will bypass the remote control feature of the system and the appliance main burner will come on if the gas valve is in the "On" position.

## MAINTENANCE

### (See Maintenance Schedule, Page 24)

Refer to the maintenance schedule for maintenance tasks, procedures, periodicity and by whom they should be performed. Always verify proper operation of the appliance after servicing.



### WARNING

**Turn off gas and electrical power to the fireplace and allow it to cool before cleaning or servicing the appliance.**

**CAUTION: Wear gloves and safety glasses for protection while doing required maintenance.**

**Verify proper operation after servicing.**

**S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.**

**Always turn off gas to the pilot (millivolt appliances) before cleaning. Before re-lighting, refer to the lighting instructions in this manual. Instructions are also found on a pull-out panel located in the control compartment.**

**Before re-lighting the fireplace, refer to the lighting instructions in this manual. Instructions are also found on pull-out panels located below the glass door in the control compartment.**

### Inspect Venting System

The appliance and venting system should be thoroughly inspected before initial use and at least annually by a qualified service technician (inspection should include ensuring that exhaust or intake passages are unobstructed and vent components are properly assembled and not damaged). **Homeowner must contact a qualified service technician at once if any abnormal condition is observed.**

If the venting system is disassembled for any reason, a qualified service technician should follow vent installation instructions for proper reassembly and proper sealing of the venting system components. However, more frequent periodic inspections and cleanings should be performed by the homeowner.

### Cleaning Glass

(see *Front Glass Enclosure Panel, Removal and Installation* on **Page 12**).

**Note:** Clean glass after first two weeks of operation (after *Burn-In* period is over) and then only when necessary and when the fireplace is cool. Wipe surface with clean, dampened, soft cloth. Follow with dry, soft towel as desired. Take care not to scratch the glass surface.

The viewing glass should be cleaned periodically to remove any build-up caused from the following:

**IMPORTANT: Do not use abrasive cleaners on glass. Never clean the glass when it is hot.**

- During start-up, it is normal for condensation to form on the inside of the glass (this condensation and fog will usually disappear in a few minutes). The moisture can cause lint, dust and other airborne particles to cling to the glass surface.
- Initial curing of the high temperature paint and burning off of lubricants used in the manufacturing process may result in a film on the glass.
- A white coating may form on the glass as a result of impurities and minerals in the fuel.

It is recommended that the glass be cleaned two or three times during each heating season, depending on the circumstances present. The following cleaning solutions are approved for use to clean glass:

- Non-ammonia based household cleaner
- 50%-50% mix of white vinegar and water
- Gas fireplace/stove glass cleaner

**Inspect Glass Gasket** - Visually inspect the gasket on the backside of the glass enclosure panels. The gasket surface must be clean, free of irregularities and seated firmly.

### Clean Control Compartment

Keep control compartment clean by vacuuming or brushing at least twice a year. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is important that control compartments, burners and circulating air passageways of the appliance be kept clean.

### Clean Logs And Burner

Carefully remove the logs (use care when handling the fiber logs, as they become quite fragile after curing). Vacuum out any foreign matter (lint, carbon, etc.) on the burner. Ensure the burner ports are "open." Remove any carbon deposits from the under side of the logs using a vacuum cleaner, or a soft bristled brush (i.e. paint brush).

**Note:** Improper positioning of logs can create carbon build-up and will alter the performance of the appliance.

### Replacing Logs

If the logs become damaged by accident or improper handling and need replacement, use only the proper replacement logs from manufacturer (see **Page 26** for ordering information).

### Re-Install Embers and Logs

Carefully follow placement instructions on **Pages 13 through 16**. All logs should fit onto corresponding pins and/or log stoppers. This will ensure a proper flame and safe combustion.

### Inspect Wiring

Refer to wiring diagram on **Page 19**.

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

**ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de câblage peuvent entraîner un fonctionnement inadéquat et dangereux.**

Inspect and clean all wire connections. Ensure that there is no melting or damage. Inspection should include:

- Terminals at the Valve
- OFF/ON Switch
- (Optional Control Switch) Wall Thermostat, Remote Control or Remote Wall Switch Kit

### Inspect Burner Flame Appearance

Ensure that the burner flame appearance resembles the flame shown in **Figures 14 through 16** and as described in *Flame Appearance and Sooting* on **Page 17**. The Homeowner must contact a qualified service technician at once if any abnormal condition is observed.

### Small Area Paint Touch-up

The finish of the appliance is a high-quality powdercoat. Only use factory supplied powdercoat paint kit for touch-ups. Paint is available at your local authorized Lennox Hearth Products dealer. Never attempt to paint a hot fireplace.

Do not attempt to repaint the appliance until the finish is completely cured (see *Burn-In Period* on **Page 7**). If the surface later becomes stained or marred, it may be lightly sanded and touched up with spray paint.

## Front Glass Enclosure Panel, Removal and Installation

### **! WARNING**

- Do not attempt to substitute the materials used on this door, or replace cracked or broken glass.
- Handle this glass with extreme care! Glass is susceptible to damage – Do not scratch or handle roughly while reinstalling the glass door frame.
- The glass door(s) of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked or chipped glass separately.
- Do not attempt to touch the front enclosure glass with your hands while the fireplace is in use.

### **! WARNING**

Do not operate appliance with the glass front removed, cracked or broken.

### **! AVERTISSEMENT**

Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.

Remove the cast iron face kit.

### **! CAUTION**

Do not attempt to remove until the faceplate is cool.

Cast Iron Face Kit:

1. Lift the top arched piece up and pull directly out.
2. Lift the bottom piece up and pull directly out.
3. Lift the side pieces up and pull directly out.

### **! WARNING**

Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

### **! AVERTISSEMENT**

Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

Only doors certified with the appliance shall be used.

Seules des portes certifiées pour cet appareil doivent être utilisées.

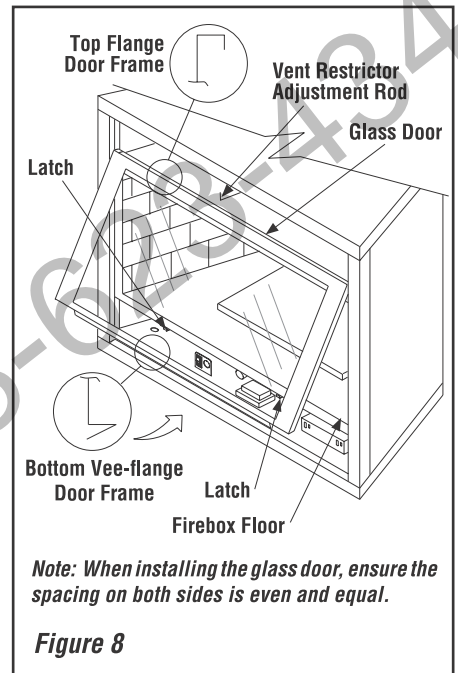
**CAUTION: DO NOT** abuse glass door by striking or slamming shut.

These are direct-vent appliances. They are designed to operate only when the front glass enclosure panels are installed. Generally the front glass enclosure panel should not be removed except to gain access to the components within the firebox.

#### Removing Glass Enclosure Panels (see *Figure 8*)

1. Access the glass door securing latches. Pull the latches forward and down to release them from the door channel.
2. Pull the bottom of the door out a few inches and grasp it on the right and left. Gently lift to release the door from its channel above the door. Pull the door forward.
3. Retrieve the glass door. Visually inspect the gasket on the backside of the frame. Gasket surface must be clean, free of irregularities and seated firmly.

4. Position the door in front of the firebox opening with the bottom of the door held away from the fireplace (*Figure 8*). Hook the top flange of the door frame over the top of the firebox frame.
5. Let the bottom of the door frame swing gently in towards the fireplace ensuring that the gasket seats evenly as the door frame draws shut. Fasten the two latches located underneath the firebox floor to the door's vee-flange. Close both the latches securely.



#### INSTALL CERAMIC PANELS, GLOWING EMBERS AND LOGS

**NOTE:** Turn off all electricity to the appliance before you install volcanic stone, embers and logs.

**Note:** The log set and fire are artistically arranged to provide a random asymmetric look to the fire. The fire *intentionally* does not burn in the left rear quarter of the log set.

Carefully position the ceramic fiber logs and twigs over the burner as shown in *Figures 12 (LSS-35) or 13 (LSS-40)*.

These fires are designed to provide a rich orange/red glow on the logs. If the logs are being installed for the first time, the following paragraphs apply:

## INITIAL INSTALLATION CONSIDERATIONS

If the ceramic panels and logs are being installed for the first time, the following paragraphs apply:

DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.

**Step 1.** Remove the boxed ceramic panels on top of the appliance. Handle panels carefully to prevent breakage.

**Step 2.** Remove the appliance front door.

**Step 3.** Cut and remove the nylon securing the log grate and the boxed log set to the interior of the fireplace.

**Step 4.** Remove the logs from their packaging. Handle logs carefully to prevent breakage.

**Step 5.** Remove the restraining strap from the grate tines. Remove the grate from the interior of the fireplace.

## CERAMIC PANEL, LOG AND GLOWING EMBER PLACEMENT

**Step 1.** Install the ceramic panels as shown in **Figure 11**. Panels should be placed in the order shown.

**A.** Tilt and slide the top edge of the back panel toward the rear, behind the baffle and pivot the bottom inward to position it vertically as shown.

**B.** Align and slide the left and right bottom panels inward as shown. Slide the front panel toward the back, until it touches the left and right panels. Be sure there are no gaps between the panels.

**C.** Slide the left and right side panel inward with the orientation of the marked "L" and "R" in their proper position as shown.

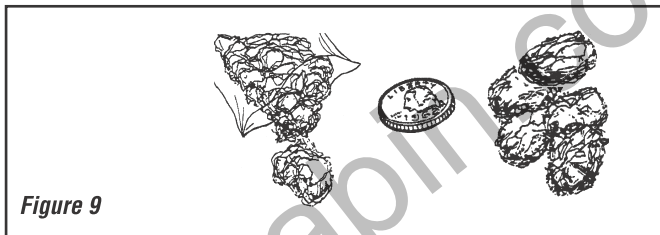


Figure 9

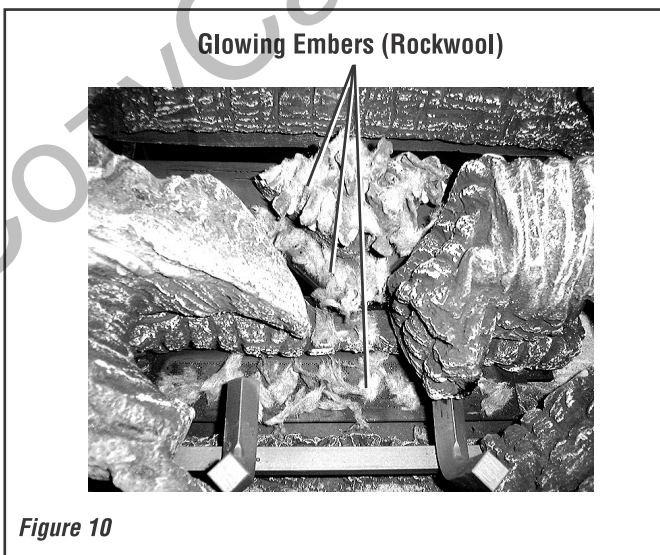


Figure 10

**Step 2.** Position the individual logs as shown in **Figures 12 and 13**. Logs should be placed in the order shown.

**Step 3.** Separate the Glowing Ember (Rockwool) into pieces about the size of a quarter (see **Figure 9**). Keep the pieces fluffed up, not matted. Distribute these pieces over the front burner and between the log as shown in **Figure 10**. Do not use more than is necessary. When properly positioned, the Glowing Embers will cover approximately 85% of the front burner.

**Note:** This appliance is provided with enough Glowing Embers for several applications, do not feel compelled to use all that is in a new bag. For best glowing effect, replace the ember material annually. Replacement Glowing Embers are available (Catalog Number 88L53).

Proper log and twig placement is critical to encourage outstanding flame appearance and prevent sooting. When positioned properly as shown, twigs will be positioned between flame peaks and will not impinge any flames.

REFERENCE Firebox Accessories / Parts		
Catalog Number	Model Number	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Decorative Volcanic Stone

## ⚠ WARNING

- DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.
- The size and position of the log set was engineered to give the appliance a safe, reliable and attractive flame pattern. Any attempt to use a different log set in the fireplace will void the warranty and will result in incomplete combustion, sooting, and poor flame quality.
- Logs get very hot and will remain hot up to one hour after gas supply is turned off. Handle only when logs are cool. Turn off all electricity to the appliance before you install grate, volcanic stone, vermiculite, embers and logs.
- This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.
- If logs are not installed according to the log installation instructions, flame impingement and improper combustion could occur and result in soot and/or excessive production of carbon monoxide (CO), a colorless, odorless, toxic gas.

## CERAMIC PANEL PLACEMENT

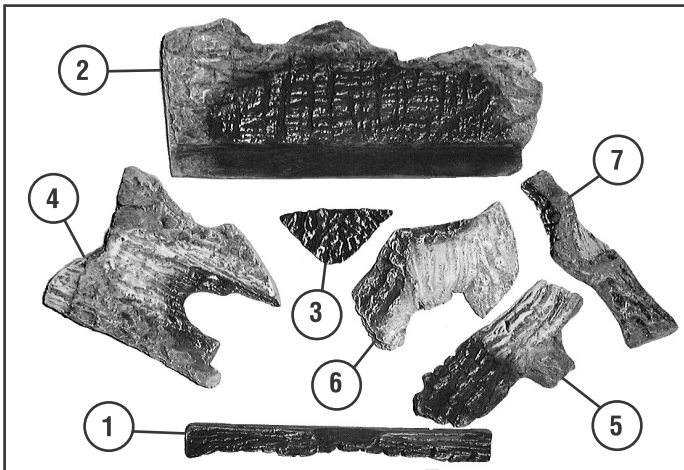
Catalog Number for the entire Ceramic Panel set: 41M86 (for LSS-35) and 41M87 (for LSS-40).



Figure 11

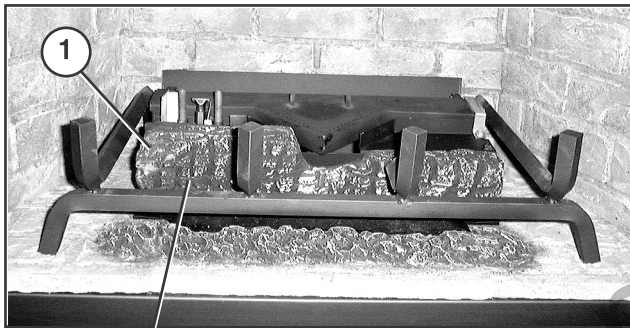
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

## LSS-35 LOG PLACEMENT

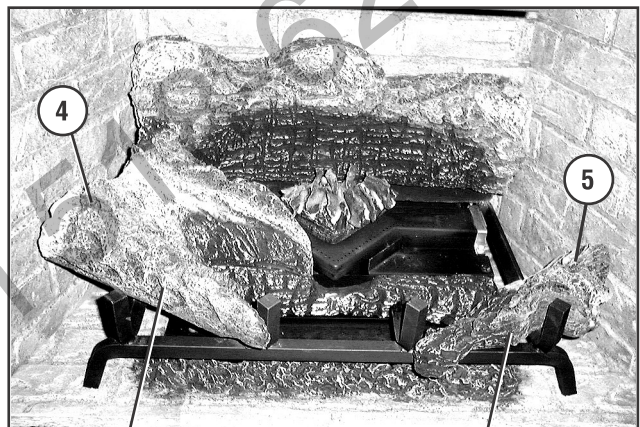


Log Number	Description
1	Log, Front/Bottom/Center
2	Log, Rear
3	Log, Center
4	Log, Front/Left
5	Log, Front/Right
6	Log, Right
7	Log, Top/Right

Catalog Number for the entire log set: 35M61



Align holes on the bottom of log (1) over the tabs and push down.



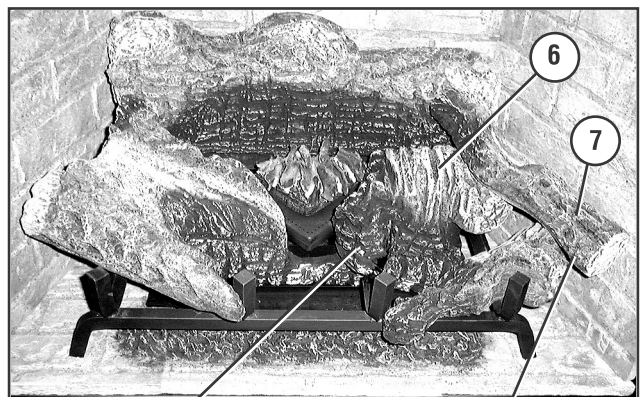
Align groove at the bottom of log (4) over the tyne and slide it backward to touch log (2).

Align groove at the bottom of log (5) over tyne and slide forward.



Align holes at the bottom of log (3) over the pins.

Align groove at the bottom of log (2) over the grate and push it toward the rear.

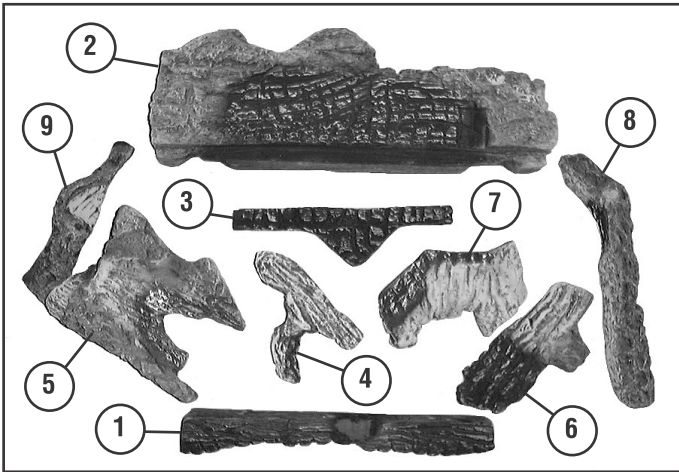


Place log (6) between 90° bend and log (5).

Rest log (7) on lower logs, over the flattened surfaces of the logs.

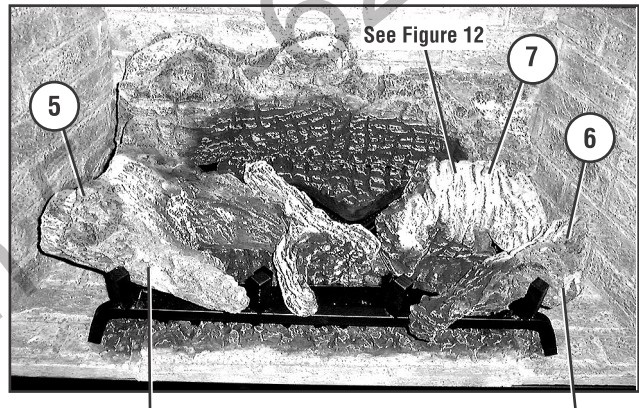
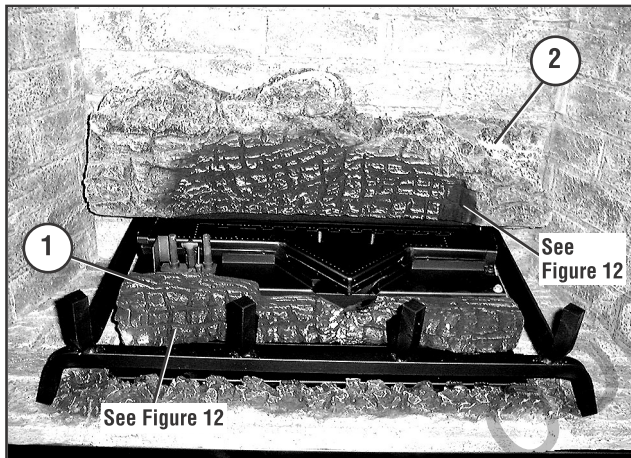
Figure 12

## LSS-40 LOG PLACEMENT



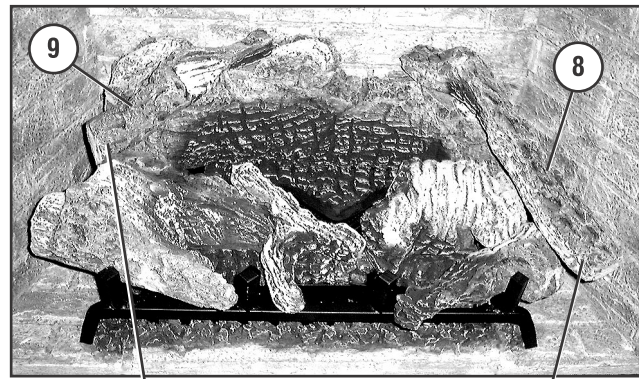
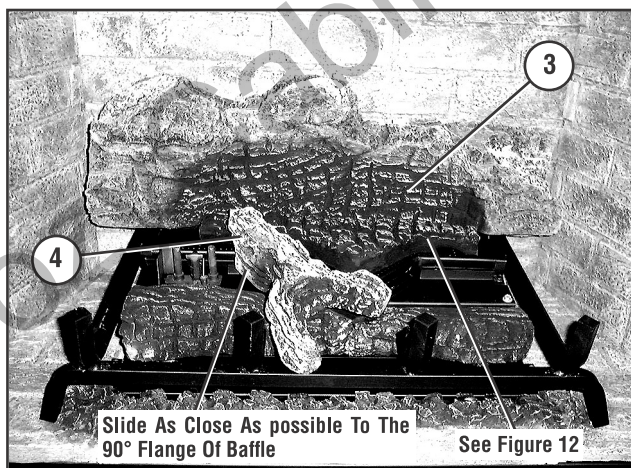
Log Number	Description
1	Log, Front/Bottom/Center
2	Log, Rear
3	Log, Center
4	Log, Front/Center
5	Log, Front/Left
6	Log, Right
7	Log, Front/Right
8	Log, Top/Right
9	Log, Top/Left

Catalog Number for the entire log set: 35M62



Align groove at the bottom of log (5) over the tyne and slide it forward.

See Figure 12.



See Figure 12.

See Figure 12.

Figure 13



**BURNER ADJUSTMENTS  
(QUALIFIED TECHNICIANS ONLY)**

**Flame Appearance and sooting**

Proper flame appearance is a flame which is blue at the base and becomes yellowish-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 15 minutes of operation. If after a short period the flame stays lowered blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter openings closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination.

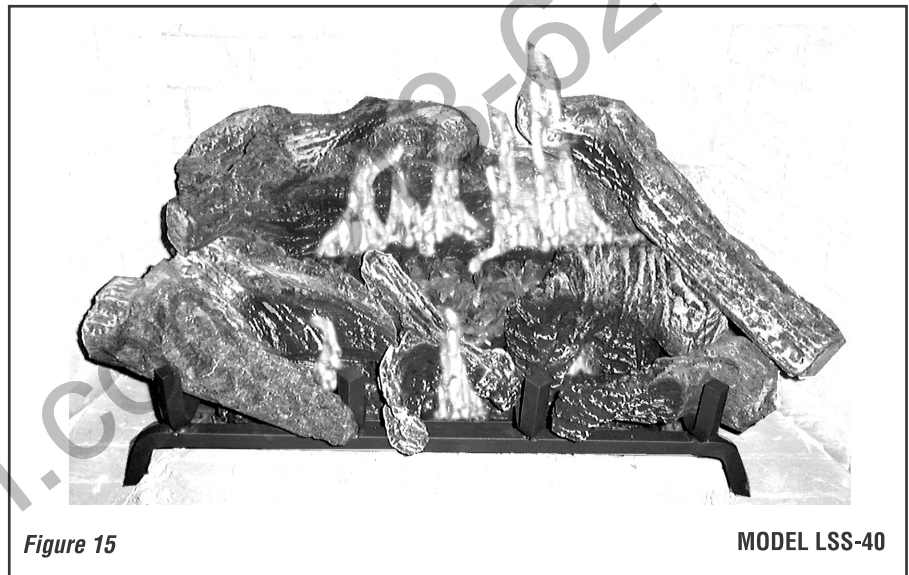
Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellowish-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

**Air Shutter Adjustment Guidelines**

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs. If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more open position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

The following chart is provided to aid you in achieving the correct air shutter adjustment for your installation.

<b>Air Shutter Adjustment Guidelines:</b>		
<b>Amount of Primary Air</b>	<b>Flame Color</b>	<b>Air Shutter Adjustment</b>
If air shutter is closed too far →	Flame will be orange →	Air shutter gap should be increased
If air shutter is open too far →	Flame will be blue →	Air shutter gap should be decreased



## Burner Air Shutter Adjustment Procedure

### ! WARNINGS

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure front glass panel are in place and sealed during adjustment.

### ! CAUTIONS

- Carbon will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.
- The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.

1. Locate adjustment lever and adjust air shutter to the standard setting as shown in **Figure 16** (adjustment rod is located in the lower control compartment).

**Note:** Pushing the adjustment lever back to decrease air and pulling forward to increase air.

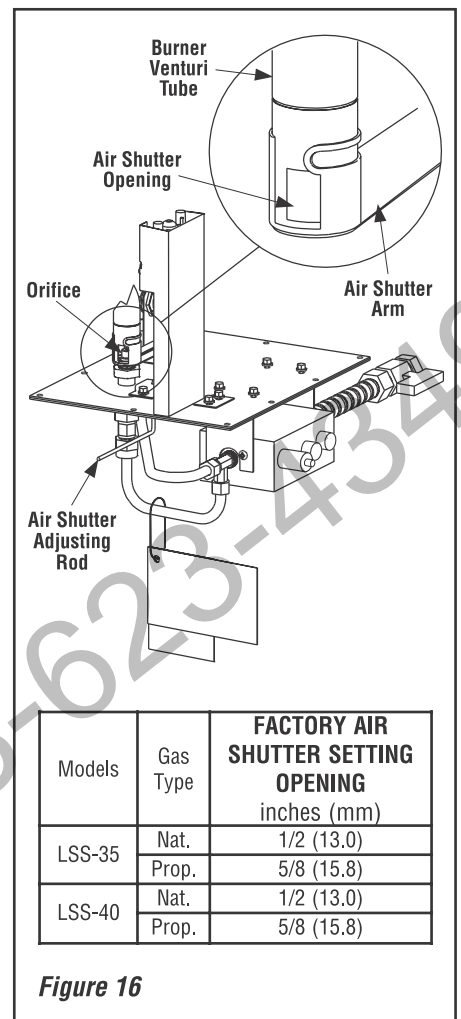
2. Light appliance (follow lighting procedure on lighting label in control compartment or see the lighting instructions, **Page 22** in this manual).
3. Allow the burner to operate for at least 15 minutes while observing the flame continuously to ensure that the proper flame appearance has been achieved (see **Figures 14 or 15 on Page 17**). If the following conditions are present, adjust accordingly.
  - If flame appears weak or sooty, adjust the air shutter, incrementally, to a more open position until the proper flame appearance is achieved.
  - If flame stays lowered blue, adjust the air shutter, incrementally, to a more closed position until the proper flame appearance is achieved.
4. Leave the control knob (off/pilot/on) in the ON position and the burner OFF/ON switch OFF (and remote switches, if applicable).
5. When satisfied that the burner flame appearance is normal, close the lower control compartment door (see **Figures 14 or 15 on Page 17**).

### Appliance Checkout

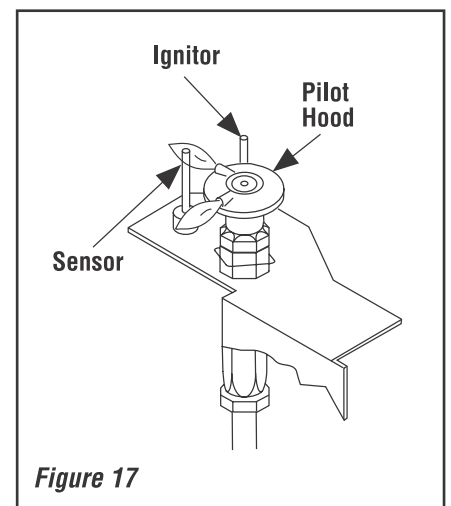
The pilot flame should be steady, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermopile) should be engulfed in the pilot flame. The flame should project 1" (25 mm) beyond the hood at both ports (see **Figure 17**).

To light the burner, refer to the lighting instructions on **Page 22**.



**Figure 16**



**Figure 17**

## WARRANTY

Your gas appliance is covered by a limited twenty year warranty. You will find a copy of the warranty accompanying this manual. Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

## REPLACEMENT PARTS

A complete parts list is found at the end of this manual. Use only parts supplied from the manufacturer.

With proper care and maintenance, your appliance will provide many years of enjoyment. If you should experience any problem, first refer to the troubleshooting guide in this manual. If problem persists, contact your Lennox Hearth Products dealer or distributor.

Normally, all parts should be ordered through your Lennox Hearth Products distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

1. The model number of the appliance.
2. The serial number of the appliance.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the appliance.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer or distributor.

**LENNOX HEARTH PRODUCTS**  
 1508 Elm Hill Pike, Suite 108  
 Nashville, TN 37210  
 visit us at [www.Lennox.com](http://www.Lennox.com)  
 1-800-9-LENNOX

## PRODUCT REFERENCE INFORMATION

We recommend that you record the following important information about your fireplace. Please call Lennox Hearth Products for the phone number of your nearest Lennox Hearth Products dealer who will answer your questions or address your concerns.

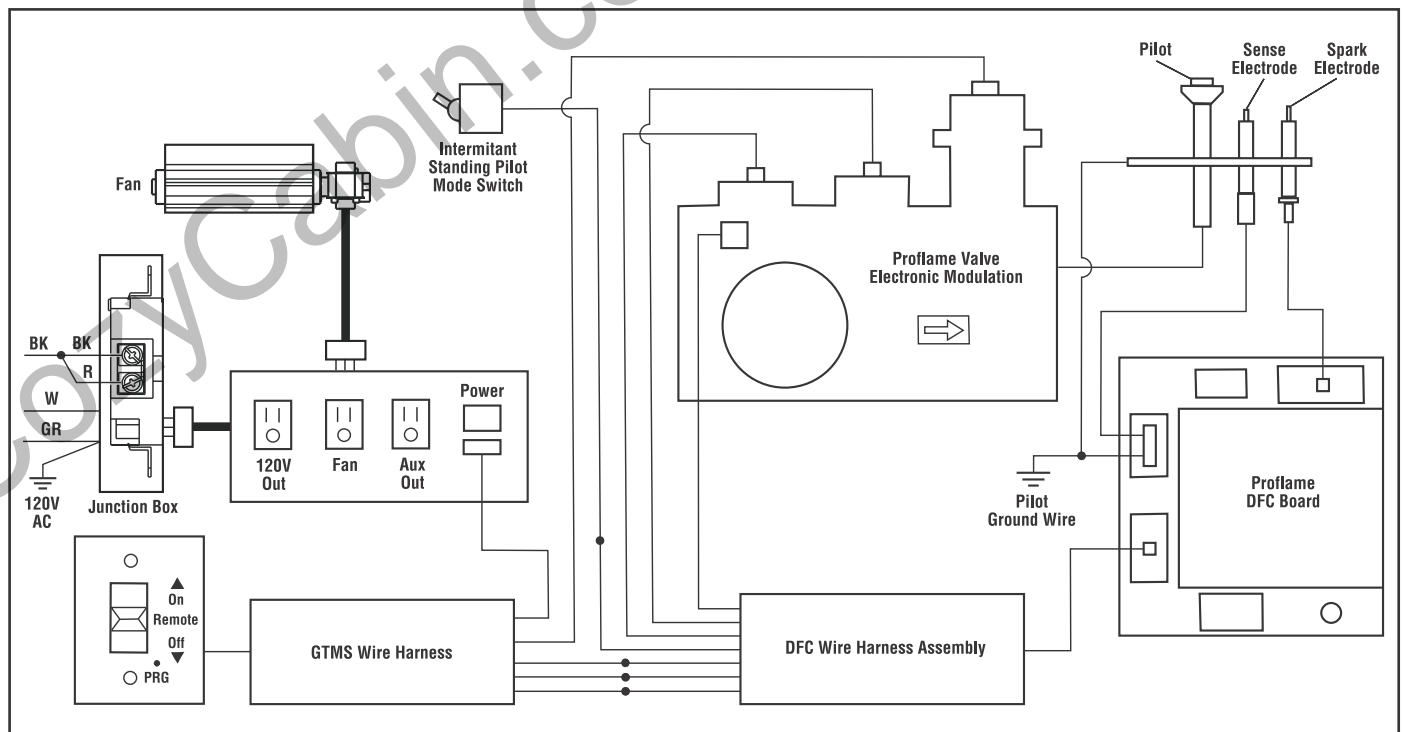
Your Fireplace's Model Number	_____
Your Fireplace's Serial Number	_____
The Date On Which Your Fireplace Was Installed	_____
The Type of Gas Your Fireplace Uses	_____
Your Dealer's Name	_____

## WIRING DIAGRAM

The wiring diagram is provided here for reference purposes only. This information is also provided on schematics attached directly to the appliance on a pullout panel located within the control compartment.

**CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS APPLIANCE OPERATION.**

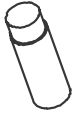
**ATTENTION: AU MOMENT DE L'ENTRETIEN DES COMMANDES, ÉTIQUÉTEZ TOUS LES FILS AVANT DE LES DÉBRANCHER. DES ERREURS DE CÂBLAGE PEU-VENT ENTRAÎNER UN FONCTIONNEMENT INADÉQUAT ET DANGEREUX.**



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

## ACCESSORY COMPONENTS

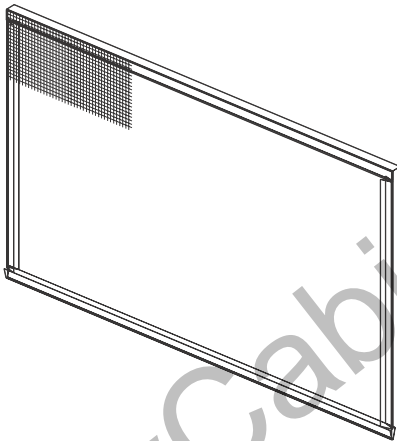
Product Reference Information			
Cat. No.	Model	Ship. Weight	Ship. Volume
H0376	LSS-35N	204 lb.	42 cu. ft.
H0377	LSS-35P	204 lb.	42 cu. ft.
H0396	LSS-40N	231 lb.	47.6 cu. ft.
H0397	LSS-40P	231 lb.	47.6 cu. ft.



Touch-Up Paint (Black) Kit    90L73    FTPK-B

### Touch-Up Paint Kit

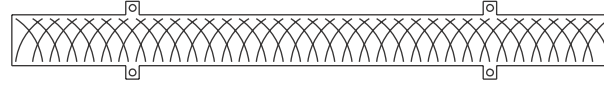
Repair of minor scratches and discoloration of the appliance's painted surfaces may be accomplished with the use of this touch-up paint kit.



35" Screen Panel Kit    H5059    SPKLSS-35  
40" Screen Panel Kit    H5060    SPKLSS-40

### Spectra Screen Panel Kit

These screen panels can be installed on the glass enclosure panel to prevent direct contact with the hot glass surface. The screen panel kits cannot be used in conjunction with any of the other door kits or door frame kits.



### Grillwork Kits (Top & Bottom)

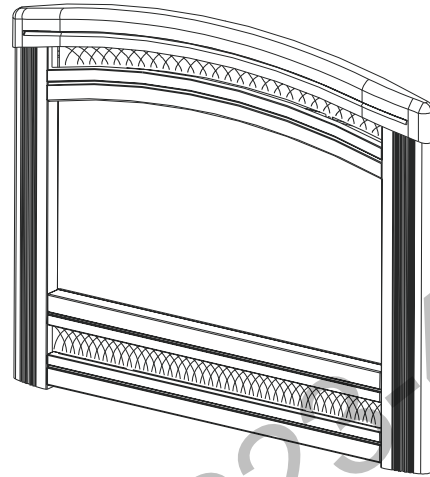
Model Series	Finish	Catalog No.	Model No.
LSS-35	Black	H0379	LSS-GB35
	Gold	H0380	LSS-GG35
	Nickel	H0381	LSS-GN35
LSS-40	Black	H0399	LSS-GB40
	Gold	H0400	LSS-GG40
	Nickel	H0404	LSS-GN40

### Grillwork Kits (Top & Bottom)

These grillwork kits are designed to be used in conjunction with the Cast Iron Face kits. Together, when installed, these complete the front aspect of the Spectra LSS Series gas fireplace. A detailed set of instructions (P/N 750,151M) is included with each kit.

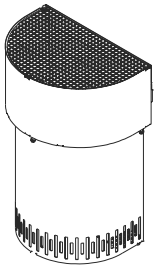
**ACCESSORY COMPONENTS CONTINUED**

Cast Iron Kits		
Model Series	Catalog No.	Model No.
LSS-35	H0378	LSS-CA35
LSS-40	H0398	LSS-CA40



**Cast Iron Kits**

These cast iron face kits are designed to be used in conjunction with the grillwork kits. Together, when installed, these kits complete the front aspect of the Spectra LSS Series gas fireplaces. A detailed set of instructions (P/N 750,150M) is included with each kit.



*Termination Shroud  
(Fits H1968)*

Termination Guard Kits (all models)		
Cat. No.	Model No.	Description
H5820	4.5HTSK	Termination Shroud

**Termination Guard Kits**

The vent termination shroud may be used to cover the vent termination on the exterior of the home to minimize exposure to the hot surface of the termination.

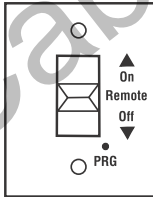
## LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

**WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.**

- A.** When lighting the appliance, follow these instructions exactly.
- B. BEFORE OPERATING** 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**
- Extinguish any open flame.
  - Open windows.
  - Do not light any appliance.
  - Do not touch any electrical switches.
  - Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.
  - If your gas supplier cannot be reached, call the fire department.
- C.** Use only your hand to turn the gas control lever. Never use tools. If the lever will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or an 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.

## LIGHTING INSTRUCTIONS

- 1. STOP!** Read the safety information above on this page.
  - Turn remote wall switch to "OFF" or set wall thermostat to lowest setting. If used, remove the batteries from the battery holder.
  - This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
  - Push the unit mounted "ON/OFF" switch to the "OFF" position.
  - Allow sufficient length of time (minimum 5 minutes) for any gas in the combustion chamber to escape. If you still smell gas, STOP! Follow "B" in the safety information above on this page. If you do not smell gas, go to the next step.
  - Push the unit mounted "ON/OFF" switch back to the "ON" position. (The "ON/OFF" switch may include a wall switch if so equipped). Replace the batteries in the battery holder, if used. If the burner does not light or stay lit after several tries, turn the unit mounted "ON/OFF" switch to the "OFF" position and call your service technician or gas supplier. NOTE: Sufficient time must be allowed for air to escape from lines if the unit is being lit for the first time.
  - Turn HI-LO burner control knob to desired setting and close control door.
  - Set thermostat to desired setting if applicable.
  - If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.
- 
- TO SHUT OFF**
- Turn off all electrical power to the appliance (remote wall switch) or set the thermostat to the lowest setting, if applicable. Or remove batteries, if used.

## TO TURN OFF GAS TO APPLIANCE

- For complete shut-down, turn remote wall switch to "OFF" or set the thermostat to the lowest setting, if applicable.
- Turn the ON/OFF switch to "OFF". If step 1 is not applicable.
- Turn off all electric power to the appliance and remove backup batteries if service is to be performed or for extended shutdown.

## INSTRUCTIONS D'ALLUMAGE

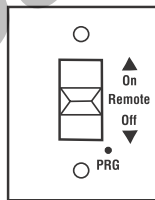
### POUR VOTRE SÉCURITÉ, LISEZ CES INSTRUCTIONS AVANT L'ALLUMAGE

**AVERTISSEMENT: SI VOUS NE SUIVEZ PAS CES INSTRUCTIONS À LA LETTRE, IL POURRAIT S'EN SUIVRE UN INCENDIE OU UNE EXPLOSION CAUSANT DES DOMMAGES MATÉRIELS, DES BLESSURES CORPORELLES OU MÊME DES PERTES DE VIE.**

- A.** Lorsque vous allumez l'appareil, suivez exactement ces instructions.
- B. AVANT L'ALLUMAGE:** Assurez-vous que vous ne détectez aucune odeur de gaz autour de l'appareil ainsi que près du sol; certains gaz, étant plus lourds que l'air, descendent au niveau du sol.
- VOICI CE QUE VOUS DEVEZ FAIRE SI VOUS DÉCELEZ UNE ODEUR DE GAZ**
- Éteignez toute flamme visible.
  - Ouvrez les fenêtres.
  - N'allumez aucun appareil.
  - Ne touchez à aucun commutateur électrique.
  - Ne vous servez d'aucun téléphone dans votre édifice.
- Appelez immédiatement votre compagnie de gaz en utilisant le téléphone du voisin.
  - S'il vous est impossible de contacter votre compagnie de gaz, appelez le service des incendies.
- C.** N'utilisez que votre main pour manipuler l'interrupteur "ON/OFF" de la valve à gaz. N'utilisez jamais d'outils. Si l'interrupteur ne bouge pas manuellement, n'essayez pas de le réparer. Communiquez immédiatement avec un technicien de service qualifié. Toute tentative pour forcer l'interrupteur ou le réparer, risquerait de provoquer un incendie ou une explosion.
- D.** Ne vous servez pas de cet appareil si l'un de ses éléments a été immergé dans l'eau. Appelez immédiatement un technicien compétent pour faire inspecter l'appareil et remplacer toute pièce du système de réglage ou commande du gaz qui a été sous l'eau.

## INSTRUCTIONS D'ALLUMAGE

- 1. ARRÊTEZ !** Lisez les consignes de sécurité au verso de cette plaque.
2. Tournez l'interrupteur mural à la position d'arrêt "OFF".
3. Ouvrez la porte du compartiment de contrôle du bas.
4. Assurez-vous que la soupape d'arrêt de la canalisation principale est ouverte.
5. Tournez la manette de réglage du gaz à la position d'arrêt "OFF".
6. Attendez cinq (5) minutes pour l'évacuation du gaz. Si vous décelez une odeur de gaz ARRÊTEZ ! Retournez au point "B" des consignes de sécurité au verso de cette plaque. Si vous ne remarquez aucune odeur de gaz, passez à l'étape suivante.
7. Tournez la manette de réglage du gaz jusqu'à la position de marche "ON". Ne la forcez pas.
8. Ouvrez le courant électrique ("ON") qui alimente l'appareil (interrupteur mural).
9. Fermez la porte du compartiment de contrôle du bas.
10. Au besoin, rebrancher l'appareil au courant électrique et remettre l'interrupteur principal du brûleur à la position "ON" ou régler le thermostat à la température désirée.
11. Si l'appareil ne se met pas en marche, suivre les instructions intitulées "Pour fermer le gaz qui alimente l'appareil" et appeler un technicien ou le fournisseur de gaz.



### POUR ÉTEINDRE L'APPAREIL

1. Coupez tout le courant électrique qui alimente l'appareil (interrupteur mural).

### POUR FERMER LE GAZ QUI ALIMENTE L'APPAREIL

1. Pour une fermeture complète, tournez l'interrupteur mural à la position d'arrêt "OFF".
2. Ouvrez la porte du compartiment de contrôle du bas.
3. Tournez la manette de réglage du gaz à la position d'arrêt "OFF". Ne la forcez pas.
4. Fermez la soupape d'arrêt de la canalisation principale.
5. Fermez la porte du compartiment de contrôle du bas.

## Maintenance Schedule

### Annually (Before the onset of the Burning Season)

Maintenance Task	Accomplishing Person	Procedure
Inspecting/Cleaning Burner, Logs and Controls	Qualified Service Technician	Inspect valve and ensure it is properly operating. Check piping for leaks. Vacuum the control compartment, fireplace logs and burner area.
Check Flame Patterns and Flame Height	Qualified Service Technician	Refer to <b>Figures 14 (LSS-35) or 15 (LSS-40) on page 20</b> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs.
Inspecting/Cleaning Pilot and Burner	Qualified Service Technician	Remove any surface build-up on pilot and burner assembly. Wipe the pilot nozzles, ignitor/flame rod and hood. Ensure the pilot flame engulfs the flame sensor as shown.
Checking Vent System	Qualified Service Technician	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation of the vent components.
Appliance Checkout	Qualified Service Technician	Perform the appropriate appliance checkout procedure detailed in this manual.
Replacing Rockwool Ember Materials	Homeowner/Qualified Services Technician	Remove old ember materials and vacuum the rockwool placement area. Place new rockwool as described in this document.

### Periodically (After the Burning Season)

Maintenance Task	Accomplishing Person	Procedure
Cleaning Firebox Interior	Homeowner	Carefully remove logs, rockwool and decorative volcanic stone and vermiculite. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, Rockwool and volcanic stone as detailed in this manual.
Check Flame Patterns and Flame Height	Homeowner	Refer to <b>Figures 14 (LSS-35) or 15 (LSS-40) on page 20</b> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs.
Checking Vent System	Homeowner	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation of the vent components.
Cleaning Front Glass Enclosure Panel	Homeowner	Clean as necessary following the directions provided in this manual. <b>DO NOT TOUCH OR ATTEMPT TO CLEAN GLASS WHILE HOT.</b>



## TROUBLESHOOTING THE SPECTRA FIREPLACE

**Note:** Before troubleshooting, be sure that the appliance main line gas shut-off valve and the wall switch are in the “ON” position. The following troubleshoots the fireplace only to an elementary level. For detailed Remote and Ignition System troubleshooting, refer to the instructions provided with the remote.

**Important:** Detailed valve system troubleshooting should only be accomplished by a qualified service technician.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Nothing happens when the fireplace is turned On/Off.	A. Remote is not functioning properly.	Check that the wall switch plate is set to remote (if remote was used).
		Operate the fireplace from the wall plate switch.
		Replace remote and/or receiver batteries.
	B. Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves.
	C. Unit is not receiving power.	Check/replace back-up batteries behind the wall plate.
Check building circuit breakers to ensure power is on to the fireplace.		
2. The main burner does not light and the igniter is sparking.	A. Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves.
	B. Loose wires to the valve.	Check control compartment for any obvious loose wiring (call a service technician if required).
	C. Loose wires to ignition module.	Check control compartment for any obvious loose wiring (call a service technician if required).
	D. Air in the gas line.	Purge gas line of air (call a service technician if required).
3. The main Burner comes on but then goes out.	A. Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves.
	B. Loose wires to the valve or ignition module.	Check control compartment for any obvious loose wiring (call a service technician if required).
	C. Pilot flame is not engulfing the sensor.	Call for a service technician.
	D. Obstructed vent system.	Call for a service technician.
4. Soot is present on the logs and glass.	A. Excessive flame impingement on the logs.	Properly position the logs as detailed in the fireplace Log Placement Guide.
	B. Improper air shutter opening.	Open the air shutter by pulling on the air shutter adjustment lever.

## REPLACEMENT PARTS LIST

No.	DESCRIPTION	LSS-35		LSS-40	
		Part No.	Qty.	Part No.	Qty.
1.	Enclosure, Glass Front (Complete)	H4194	1	H4195	1
2.	Latch	69L21	2	69L21	2
3.	Log Set (Complete)	35M61	1	35M62	1
4.	Burner Rear Assembly	35M77	1	35M78	1
5.	Burner Front	35M75	1	35M76	1
6.	Grate Assembly	H4207	1	H4208	1
7.	Refractory Kit	41M86	1	41M87	1
8.	Orifice, Rear Main Burner - <b>Nat. Gas</b>	60J80	1	H3721	1
8.	Orifice, Rear Main Burner - <b>LP Gas</b>	19L52	1	88J59	1
9.	Orifice, Front Main Burner - <b>Nat. Gas</b>	H4873	1	39L66	1
9.	Orifice, Front Main Burner - <b>LP Gas</b>	35M91	1	62L37	1
10.	Bag of Embers	88L53	1	88L53	1
11.	Velcro Hook Strip	67L65	4	67L65	4
12.	FRS Rocker Switch	80L41	1	80L41	1
13.	Blower Kit	80L84	1	80L84	1
14.	Flexible Connector	93L32	1	93L32	1
15.	Piezo Bracket	H1238	1	H1238	1

## GAS CONTROLS — SIT ELECTRONIC

No.	DESCRIPTION	Natural		Propane	
		Part No.	Qty.	Part No.	Qty.
30.	Gas Valve	H7270	1	H7271	1
31.	Pilot Assembly	H7268	1	H7269	1
32.	DFC Ignition Board	H7272	1	H7272	1
33.	DFC Wire Harness	H7273	1	H7273	1
34.	Receiver Kit	H7277	1	H7277	1
35.	Receiver Cable Harness	H7276	1	H7276	1
36.	Fan Control Module	H7274	1	H7274	1
37.	Remote Control	H7275	1	H7275	1
38.	Ground Wire	H7278	1	H7278	1
39.	Spark Electrode (without cable)	H7856	1	H7856	1
40.	Sense Electrode (without cable)	H7858	1	H7858	1
41.	Cable, Pilot Spark Electrode	H7857	1	H7857	1
42.	Cable, Pilot Sense Electrode	H7859	1	H7859	1

Contact an Authorized Lennox Hearth Products dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

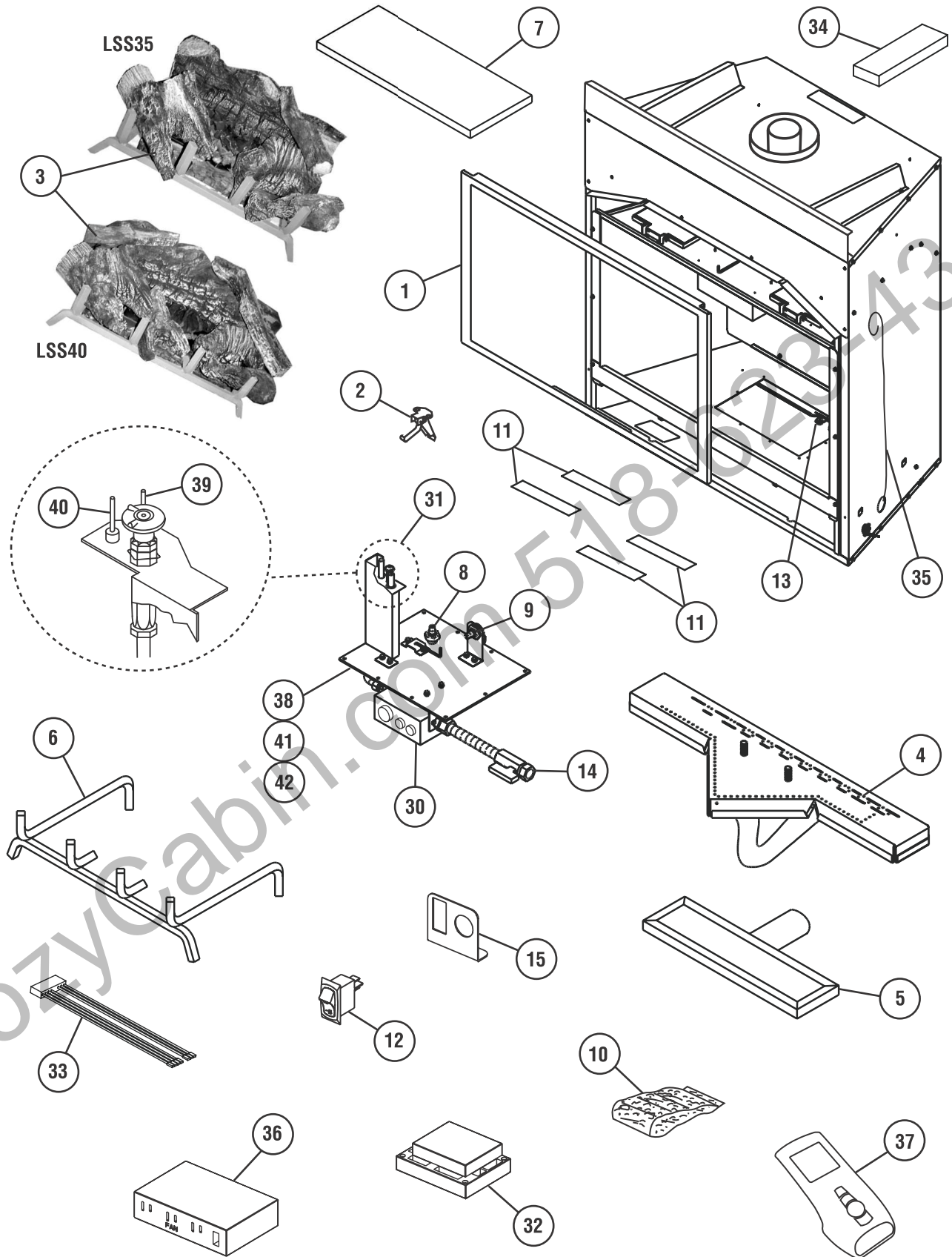
### ⚠️ WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

### ⚠️ AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

# REPLACEMENT PARTS



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

CozyCabin.com 518-623-4349

---

Lennox Hearth Products reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles, and products. Consult your local distributor for fireplace code information.

LENNOX®, the LENNOX design, DAVE LENNOX, the image of DAVE LENNOX and other related LENNOX marks are registered or common law trademarks of Lennox Industries Inc. and are used with permission.

Printed in U.S.A. © 2013 Lennox Hearth Products

**P/N 875020M Rev. G 01/2013**



1508 Elm Hill Pike, Suite 108, Nashville, TN 37210