# **Installation Manual**

# **Installation and Appliance Setup**

**INSTALLER:** Leave this manual with party responsible for use and operation.

OWNER: Retain this manual for future reference.

RUBY SERIES

Models: MDVI30IN
MDVI35IN
MDVI35IL
MDVI35IL

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* in the United States, or the *Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series.* in Canada.

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

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

See Table of Contents for location of additional Commonwealth of Massachusetts requirements.

### **WARNING:**

FIRE OR EXPLOSION HAZARD Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- 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.
  - Leave the building immediately.
  - 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.



CAUSE BURNS.

DO NOT TOUCH GLASS
UNTIL COOLED.

**NEVER** ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

# **▲** Safety Alert Key:

- DANGER! Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- WARNING! Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- CAUTION! Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE: Used to address practices not related to personal injury.

# **Table of Contents**

	Installation Standard Work Checklist
	1 Product Specific and Important Safety Information  A. Appliance Certification
	2 Getting Started  A. Design and Installation Considerations
<b>→</b>	<ul><li>3 Framing and Clearances</li><li>A. Appliance/Decorative Front Dimension Diagrams 6</li></ul>
	4 Fireplace Size Requirements  A. Minimum Fireplace Opening
	<b>5 Termination Location and Vent Information</b> A. Vent Termination Minimum Clearances
	6 Installation Preparation         A. Cleaning.       12         B. Flue Damper.       12         C. Gas Line.       12         D. Fireplace Conversion Notice       12         E. Electrical Outlet Box.       12         F. Remote Control Configuration       12
	7 Installing Vent Pipe and Appliance
	A. Vent Limits

8 Electrical Information	
<ul> <li>A. General Information</li></ul>	
C. Optional Accessories Requirements	
9 Gas Information	
A. Fuel Conversion  B. Gas Pressure  C. Gas Connection  D. High Altitude Installations  E. Air Shutter Setting	20 20 20
10 Finishing	
A. Mantel and Wall Projections	22
11 Appliance Setup	
A. Fixed Glass Assembly B. Remove the Shipping Materials C. Clean the Appliance D. Accessories E. Place the Lava Rock F. Ember Placement G. Install the Log Assembly H. Install Decorative Front/Surround.	23 23 24 24 25
12 Reference Materials	
A. Vent Components	
D Acceptation	22

# ATTENTION INSTALLER:

#### Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual. **Customer:** Date Installed: Lot/Address: **Location of Fireplace:** Installer: Model (circle one): MDVI30IN MDVI35IN Dealer/Distributor Phone # MDVI30IL MDVI35IL Serial #: WARNING! Risk of Fire or Explosion! Failure to install appliance according to these instructions could lead to a fire or explosion. **Appliance Install YES** IF NO. WHY? Verify fireplace is clean and remove/block open damper/modify damper for vent pipe clearance (Pg. 12). Appliance is leveled and secured. (Pg. 15) Venting/Chimney Section 7 (Pg. 13-17) Exhaust stainless steel flex is properly formed and routed through existing fireplace damper. Vent intake and exhaust liners are properly installed to the correct collars, sealed and secured to top plate and to the termination cap. Exterior roof flashing installed and sealed. Termination cap installed, secured and sealed to top plate. Electrical Section 8 (Pg. 18-19) Unswitched power (110-120 VAC) provided to the appliance. Switch wires properly installed. **Gas** Section 9 (Pg. 20-21) Proper appliance for fuel type. Was a conversion performed? Leak check performed and inlet pressure verified. Verified proper air shutter setting for installation type. Finishing Section 10 (Pg. 22) Combustible materials not installed in non-combustible areas. Verified all clearances meet installation manual requirements. Mantels and wall projections comply with installation manual requirements. Appliance Setup Section 11 (Pg. 23-31) All packaging and protective materials removed (inside & outside of appliance). Refractories, logs, media and embers installed correctly. Glass assembly installed and secured. Accessories installed properly. Surround or decorative front properly installed. Manual bag and all of its contents are removed from inside/under the appliance and given to party responsible for use and operation. Fireplace warning plate is attached to the existing woodburning fireplace. Remote control is programmed, functions verified using remote control instructions. Started appliance and verified no gas leaks exist. Hearth & Home Technologies recommends the following: Photographing the installation and copying this checklist for your file. That this checklist remain visible at all times on the appliance until the installation is complete. **Comments:** Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed \_ Comments Communicated to party responsible by . (Builder / Gen. Contractor/) (Installer) (Date) → = Contains updated information.

2205-982 Rev. B 11/16

# **Product Specific and Important Safety Information**

# A. Appliance Certification

MODELS: MDVI30IN, MDVI35IN, MDVI30IL, MDVI35IL

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vent Heater

STANDARD: ANSI Z21.88-2014 CSA 2.33-2014

This product is listed to ANSI standards for "Vented Gas Fireplace Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes".

Majestic gas inserts are designed for installations into solid fuel masonry or factory built fireplaces that have been installed in accordance with the National, Provincial, State and local building codes. Fireplaces are to be constructed of non-combustible materials and, in the absence of local or regional codes, meet criteria of NFPA 211. No additional outside air source is required.

**NOTICE:** 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.

#### 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.

#### **B. Glass Specifications**

This appliance is equipped with 5 mm ceramic glass. Replace glass only with 5 mm ceramic glass. Please contact your dealer for replacement glass.

#### C. BTU Specifications

<b>Mode</b> (U.S. or C	Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)	
MDVI30IN (NG)	US (0-2000 FT)	30,500	17,000	#36
MDVISUIN (NG)	CANADA (2000-4500 FT)	28,000	15,000	#37
MDVI30IL (LP)	US (0-2000 FT)	27,500	14,500	#52
MDVISUIL (LP)	CANADA (2000-4500 FT)	25,000	13,000	#53
MDVI35IN (NG)	US (0-2000 FT)	35,000	19,500	#33
MDVISSIN (NG)	CANADA (2000-4500 FT)	32,500	17,500	#34
MDV/(25)( /I D)	US (0-2000 FT)	31,500	16,500	#51
MDVI35IL (LP)	CANADA (2000-4500 FT)	27,500	15,000	#52

# D. High Altitude Installations

**NOTICE:** If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce input rate 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

Check with your local gas utility to determine proper orifice size.

### 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 plastered or unplastered shall be considered combustible materials.

#### G. Electrical Codes

**NOTICE:** 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 C22.1.

A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

# **2** Getting Started

# A. Design and Installation Considerations

Majestic gas inserts are designed for installations into solid fuel masonry or UL127 listed factory built fireplaces. No additional outside air source is required.

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

Prior to installing the gas insert:

- Ensure chimney is constructed of non-combustible materials.
- Ensure chimney is clean and in good working order.
- Ensure that all chimney cleanouts fit properly to prevent air leakage into chimney.
- Ensure combustible mantel and surround clearances comply with insert requirements.
- Ensure all joints are properly engaged and the chimney is properly secured.
- Determine minimum fireplace size. See Section 4.A.
- Determine gas supply piping requirements.
- Determine electrical wiring requirements.
- · Determine finishing details.
- Determine whether optional accessories—devices such as a wall switch or remote control—are desired.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends NFI certified professionals.



Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.

# **B. Tools and Supplies Needed**

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

Tape measure Pliers

Hammer Phillips screwdriver

Voltmeter Electric drill and bits (1/4 in.)

Gloves Safety glasses
Level Reciprocating saw
Manometer Flat blade screwdriver

Noncorrosive leak check solution

1/2 - 3/4 inch length, #6 or #8 Self-drilling screws Caulking material (300°F minimum continuous exposure rating)

# C. Inspect Appliance and Components

- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative doors and fronts may be shipped in separate packages.
- If packaged separately, the log set and appliance grate must be 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.

**WARNING!** Risk of Fire or Explosion! Damaged parts could impair safe operation. **DO NOT** install damaged, incomplete or substitute components. Keep appliance dry.

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

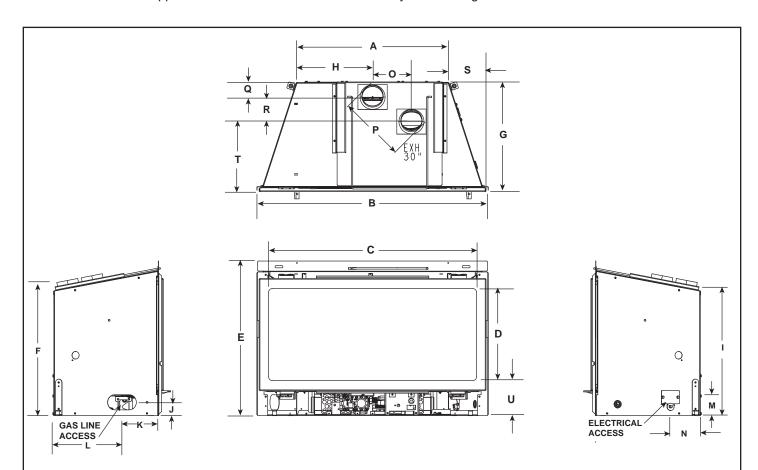
- Installation and use of any damaged appliance or vent system component.
- · Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part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

Any such action may cause a fire hazard.

WARNING! Risk of Fire, Explosion or Electric Shock! DO NOT use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water.

# A. Appliance/Decorative Front Dimension Diagrams

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 4.



MODEL DIMENSIONS					
Location	MDVI35IN/IL		MDV	/I30IN/IL	
Location	Inches	Millimeters	Inches	Millimeters	
А	23-7/16	595	20-3/16	513	
В	34-5/8	879	30-5/8	778	
С	31-5/8	803	27-1/2	699	
D	15-11/16	398	12-3/16	310	
Е	24-1/16	611	20-7/16	519	
F	21-1/8	537	17-5/8	448	
G*	15-11/16	398	14-5/8	371	
Н	11-3/4	298	10-1/16	256	
I	20-7/16	519	17	432	
J	1-3/4	44	1-3/4	44	

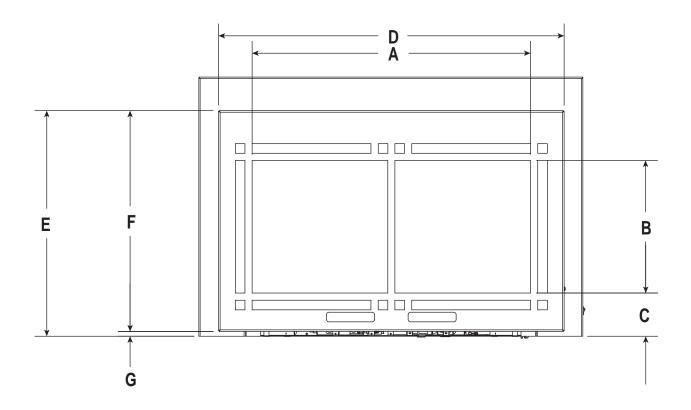
MODEL DIMENSIONS					
Location	MDV	135IN/IL	MDV	/I30IN/IL	
Location	Inches	Millimeters	Inches	Millimeters	
K	4-13/16	122	4-13/16	122	
L	10-1/16	256	9-1/8	232	
М	2-7/16	62	2-7/16	62	
N	5	127	4-1/16	103	
0	5-1/8	130	5-1/8	130	
Р	8-15/16	227	8-15/16	227	
Q	1-13/16	46	1-15/16	49	
R	3-1/4	83	3-1/4	83	
S	5-5/16	135	4-15/16	125	
Т	10-5/8	270	9-1/2	241	
U	4-11/16	119	4-5/8	117	

\*Note: Location G on Figure 14.1 is measuring the appliance depth, for installation depth reference Location G on Figure 5.2.

### Figure 3.1 Appliance Dimensions

# **DECORATIVE FRONTS**

CRDI30BK CFCRDI30BK CRDI30BZ CRDI35BK CFCRDI35BK CFCRDI35BZ



			А	В	С	D	Е	F	G
	CRDI30BK	in.	29	13-13/16	4-1/2	36	23-1/2	23	1/2
MDVI30IN/IL	CRDI30BZ CFCRDI30BK CFCRDI30BZ	mm	737	351	114	914	597	584	13
CRDI35BK		in.	31	15-13/16	4-1/2	37-15/16	25-1/2	25	1/2
MDVI35IN/IL	CRDI35BZ CFCRDI35BK CFCRDI35BZ	mm	787	402	114	964	648	635	13

Figure 3.2 Decorative Front Dimensions - CRDI30BK, CRDI30BZ, CRDI35BK, CRDI35BZ

# 4

# **Fireplace Size Requirements**

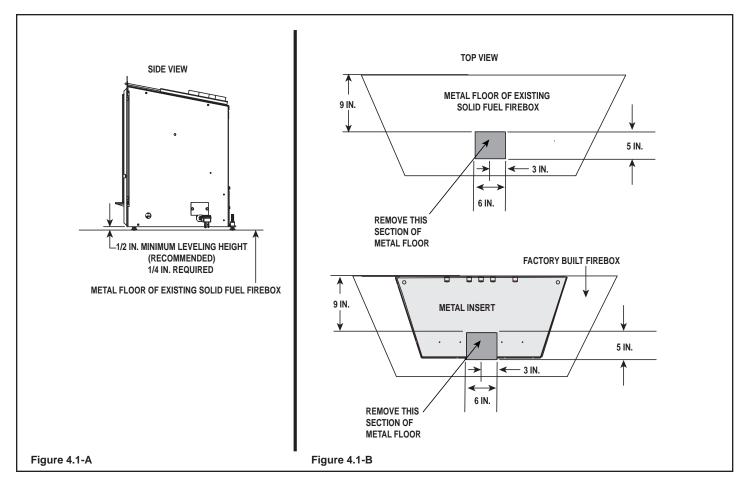
# A. Minimum Fireplace Opening

Minimum fireplace opening requirements for a standard 3/4 inch deep surround are shown in Figure 4.2. For smaller openings, an optional 1-1/2 inch deep surround is available and dimensions are shown in Figure 4.3.

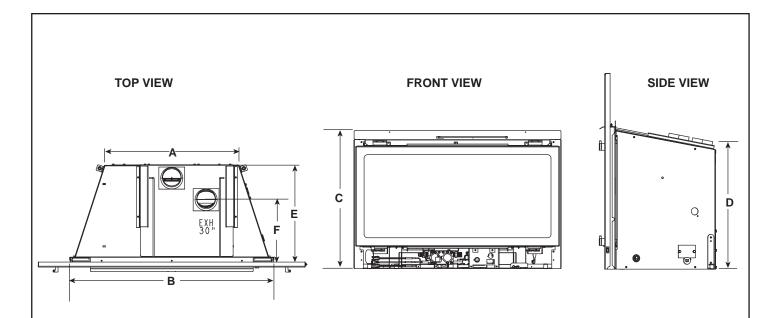
WARNING! Risk of Fire or Burns! Provide adequate clearance around air openings and for service access. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

- The firebrick (refractory), glass doors, screen rails, screen mesh and log grates can be removed from a factory built firebox in order to gain minimum gas insert opening requirements.
- Any smoke shelves, shields and baffles may be removed from the factory built firebox if attached with mechanical fasteners.

- The metal floor of the solid fuel firebox may be removed to facilitate the installation of the insert.
- Cutting of any sheet metal parts of the fireplace in which the gas fireplace insert is to be installed is prohibited, except the floor as tested for and as noted above and in Figure 4.1.
- A minimum 1/2 inch gap from the bottom of the appliance to the metal floor of the solid fuel firebox is <u>RECOMMENDED</u> for optimal fan performance. See side view in Figure 4.1



- The appliance may not be placed directly on the base of the outer wrap, a 1/4 inch airspace <u>MUST</u> be provided between the insert and the floor of the outer wrap. Use the leveling legs to raise the insert a minimum of 1/4 inch. The original fireplace may never be returned to solid fuel in this condition. The sidewalls and top structure of the firebox may not be altered with the exception of removable baffles and dampers.
- If a minimum 1/2 inch gap can not be achieved, a section of the factory-built metal floor can be removed. See Figure 4.1-B.



	MINIMUM FIREBOX OPENING						
	Location	MDVI35I	N/IL	MDVI30IN/IL			
	Location	Inches	Millimeters	Inches	Millimeters		
А	Rear Width	24	610	20-3/4	527		
В	Front Width	35-1/8	892	31-1/8	791		
С	Height-Front	24-3/8	619	20-3/4	527		
D	Height-Rear	21-1/8	537	17-5/8	448		
E**	Unit Depth	16	406	14-7/8	378		
F	Venting Depth	10-5/8	270	9-1/2	241		

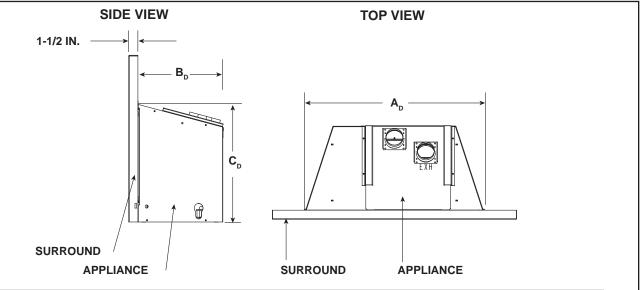
Note: Dimensions assume 1/4 inch clearance on all sides.

Note: If exhaust collar on insert and fireplace damper do not line up, add 4 inches (102 mm) to minimum fireplace height for bends in vent pipe.

In addition to these dimensions, also reference Clearances and Mantel Projections (Section 4.B).

Figure 4.2 Firebox Opening - Standard Surround

<sup>\*\*</sup>Unit depth is measured to the back of the surround to give the depth needed for installation.



	MINIMUM FIREBOX OPENING					
	Logation	MDVI35I	N/IL	MDVI30IN/IL		
Location		Inches	Millimeters	Inches	Millimeters	
A <sub>D</sub>	Alternate Unit Width	33-1/2	851	29-1/2	749	
B <sub>D</sub>	Alternate Unit Depth	15-1/8	384	14	356	
C <sub>D</sub>	Alternate Unit Height	23	584	19-3/8	492	

Note: Dimensions assume 1/4 inch clearance on all sides.

Note: If exhaust collar on insert and fireplace damper do not line up, add 4 inches (102 mm) to minimum fireplace height for bends in vent pipe.

Figure 4.3 Firebox Opening - Deep Surround

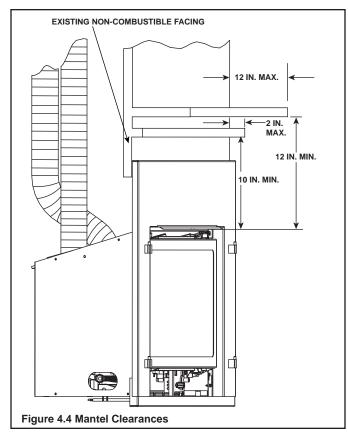
### B. Mantel and Wall Projections

**WARNING!** Risk of Fire! Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).

Clearance to combustible material under the insert is 1/4 inch (6 mm). Clearance from top of fireplace opening for combustibles extending 12 inches max. is 12 inches.

 Use leveling legs to raise insert minimum 1/4 inch (6 mm) above combustible material or outer wrap of factory built firebox.

Combustible facings must not extend behind the insert surround. For non-combustible material specifications refer to Section 1.E.



## A. Vent Termination Minimum Clearances



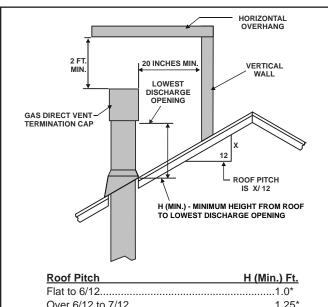
# **A** WARNING

Fire Risk.

Maintain vent clearance to combustibles as specified.

DO NOT pack air space with insulation or other materials.

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



Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*
Over 6/12 to 7/12	1.25*
Over 7/12 to 8/12	1.5*
Over 8/12 to 9/12	2.0*
Over 9/12 to 10/12	2.5*
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

<sup>\*</sup> H minimum may vary depending on regional snowfall. Refer to local codes.

Figure 5.1 Minimum Height From Roof To Lowest Discharge Opening



# **Installation Preparation**

Prepare the existing solid fuel masonry or factory built non-combustible firebox for installation.

## A. Cleaning

Prior to installing the gas insert:

 Ensure that the woodburning fireplace cavity is clean and free of ash, soot, and other debris.

# B. Flue Damper

Fully lock the solid fuel fireplace's flue damper in the open position, OR completely remove it.

#### C. Gas Line

**Note:** If the factory built fireplace has no gas access hole provided, an access hole of 1 inch (25 mm) diameter or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship - like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed.

- · Install gas line into firebox cavity.
- Check local codes and gas line sizing requirements following NFPA51. See Section 9.
- It is recommended that extra length of gas line be installed within the existing wood burner or masonry fireplace to allow removal of the insert for future servicing needs.

# D. Fireplace Conversion Notice

Permanently attach the label with the following warning to the inside lower back of the fireplace firebox into which the insert is being installed. Silicone or mechanical fasteners may be required to properly secure the label.

**WARNING!** Risk of Fire! This fireplace has been converted for use with a gas fireplace insert only and cannot be used for burning wood or solid fuels unless all original parts have been replaced, and the fireplace re-approved by the authority having jurisdiction.

### E. Electrical Outlet Box

An outlet box may be installed in a bottom back corner of the existing solid fuel masonry or factory built fireplace to power the appliance. Each unit ships standard with a cord assembly to permit blowers or other optional accessories to be used. The accessories plug into the new outlet box or may be routed out onto the hearth to a nearby outlet.

# F. Remote Control Configuration

The Intellifire™ Plus should be programmed to the RC200 remote control prior to the installation of the insert into the existing solid fuel masonry or factory built fireplace.

The control is accessed by removing the lower access panel behind the decorative front. Reference the specific RC200 user instructions for configuring the remote to the appliance.

# **Installing Vent Pipe and Appliance**

#### A. Vent Limits

The abbreviations listed in this vent table key are used in the vent diagrams.

Description	
Minimum Vertical Run Length 14 ft.	
Maximum Vertical Run Length 50 ft.	

Horizontal venting is NOT allowed.

Vertical terminations are measured to top of chimney.

This appliance is listed for use with LINK-DV systems and components only. It is permissible to extend venting above existing chimney (within specified maximum vertical limits) using SLP series or Dura Vent GS series 4 in. x 6-5/8 in. gas direct-vent pipe. Connection is made using DV-46DVA-GK.

# **WARNING!** Risk of Fire/Explosion/Asphyxiation! Do NOT connect this gas appliance to a chimney flue serving a separate solid fuel or gas burning appliance.

- May impair safe operation of this appliance or other appliances connected to the flue.
- · Vent this appliance directly outside.
- Use separate vent system for this appliance.

#### CAUTION! ALL vent specifications MUST be followed.

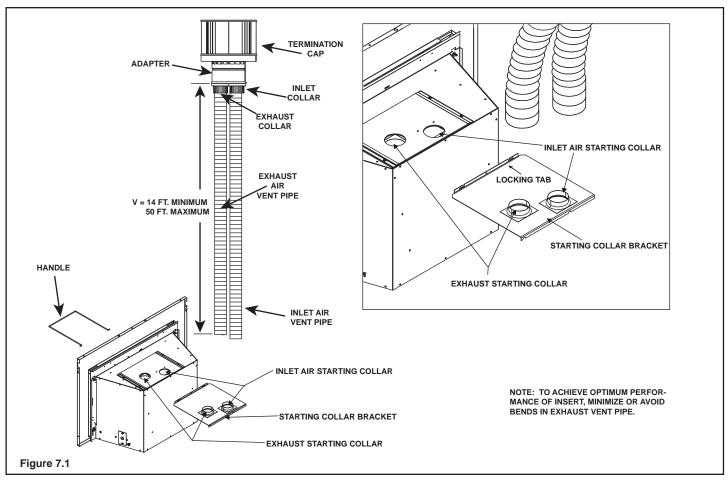
This product is tested and listed to these specifications. Appliance performance will suffer if specifications are not followed.

# **B. Venting Components**

**CAUTION!** Risk of Cuts/Abrasions/Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

The vertical vent termination system installed on this model includes:

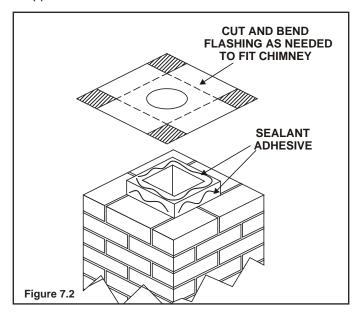
- Flexible vent pipe for exhaust air (included with vent kit).
- One length of 3-inch flexible vent pipe for combustion air (included with vent kit).
- · One pipe-to-cap adaptor (included with vent kit).
- One vertical termination cap (included with vent kit).



# C. Connecting Vent Pipe

Reference instructions in the termination kit.

- Install the 3-inch flexible vent pipe(s) down through the chimney.
- Secure the exhaust flexible vent pipe to the exhaust starting collar on top of the appliance with three screws.
   See Figure 7.1.
- Use 3 screws to attach the section of inlet air vent to the inlet collar on the collar slide plate. See Figure 7.1.
   NOTE: The collar slide plate may be removed from appliance to aid installation.



- Trim chimney top plate to minimize excess overhang or bend over flue tile (see Figure 7.2).
- Place 3/8 inch bead of 300°F silicone on flue tile top.

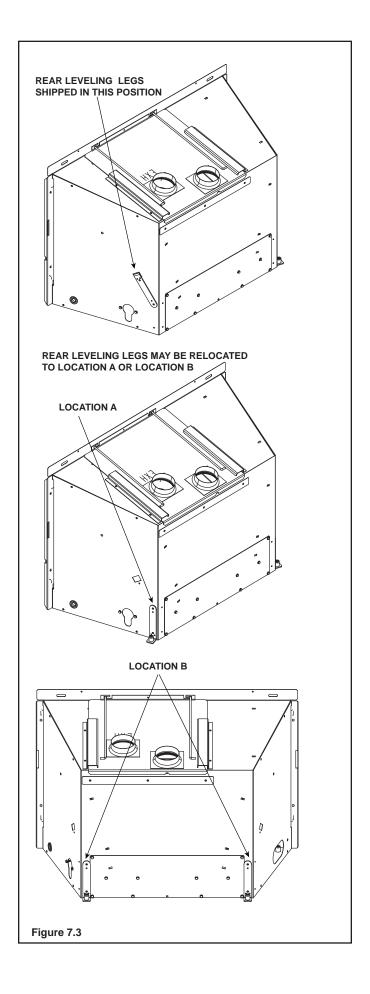
# D. Placing, Securing and Leveling the Appliance

**WARNING!** Risk of Explosion/Combustion Fumes! Connect vent sections per installation instructions.

- The 3 foot section of stainless steel flexible pipe MUST be attached directly to the exhaust collar on the collar slide plate.
- Connect exhaust vent pipe ONLY to exhaust starting collar and termination cap center collar.
- Connect inlet air vent ONLY to inlet air collar on appliance and either the termination cap inlet air collar OR terminate within chimney.
- **DO NOT** allow vent to sag below connection point to appliance.
- Remove rear leveling legs from shipping position and relocate to one of the positions shown in Figure 7.3.
   Remove both screws that secure the leveling leg to the side of the appliance. Turn the leveling leg around so that the foot is facing out and downward. Line up the two holes on the leg with the holes on the appliance and secure with screws. See Figure 7.3.
- Front leveling legs are shipped with surround and may be installed in one of two locations. See Figure 7.3.
- Install insert (without surround attached) into existing fireplace while pulling collar slide plate forward.
- · Install gas line into hole provided on side.
- Secure collar slide plate to appliance by placing locking handle into position with locking tabs (see Figure 7.1) and secure with #8 screw.
- Level the appliance from side to side and front to back.
   Adjust leveling bolts to desired vertical position so appliance is level. Use the leveling bolts included with the manual bag.
- A minimum 1/2 inch gap from the bottom of the appliance to a metal surface is recommended for optimal fan performance. See Figure 4.1-A and Figure 4.1-B.
- Position any excess flexible vent pipe back up into chimney without sagging. Twist and push flex vent together to shorten.
- Attach surround. Follow instructions for surround installation included with the front.
- Push insert into the opening so that it tightly overlaps the fireplace opening.

**WARNING!** Risk of Fire! Only an approved Hearth & Home Technologies surround may be used to cover integral grills on solid fuel burning fireplaces. No other components such as shrouds, sheetmetal plates, etc., may be used to seal off vents.

**WARNING!** Risk of Explosion! 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.



#### E. Remote Control

#### **IPI Models:**

If a remote control kit is used to control blower function, the AUX200 module can only be placed in the control cavity to the right of the control panel.

# F. Installing Adaptor and Termination Cap

**CAUTION!** Risk of Cuts/Abrasions/Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

For installation of termination cap see minimum vent heights for various pitched roofs (see Figure 7.4).

To install adaptor see Figure 7.5.

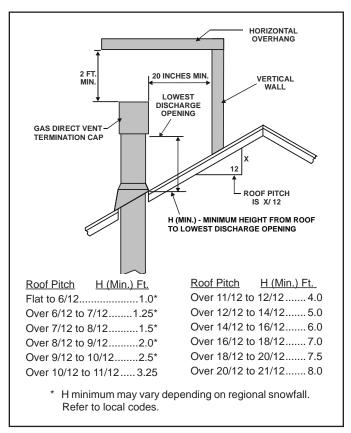


Figure 7.4 Minimum Height from Roof to Lowest Discharge Opening

# CAUTION! Risk of Cuts/Abrasions/Flying Debris.

Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

### **Damper Flashing Kit** (Optional)

For use with LINK-DV30B, LINKSQ-DV30, LINK-DV4-30B or LINKSQ-DV4-30 Liner Kit.

Note: Damper may have to be removed to use this kit.

- Run flex liners through 3 in. holes in damper flashing.
- Attach damper flashing to firebox roof with self tapping screws included in kit.

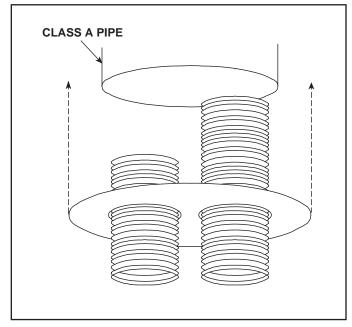
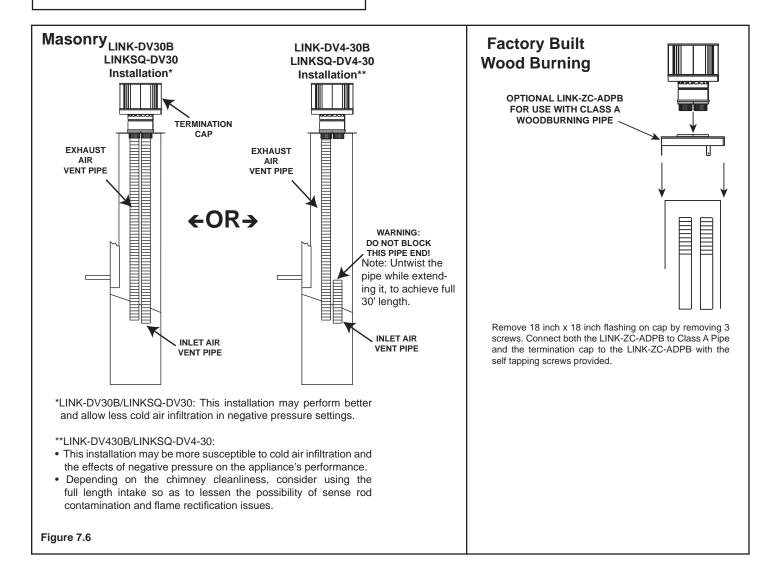


Figure 7.5

To prevent odors and cold air drafts, it may be necessary to place non-combustible insulation or field fabricated metal plates around the vent pipe flues as they go through the damper.

**Note**: The LINK-DV4-30B and LINKSQ-DV4-30 systems REQUIRE this insulation.



# 8

# **Electrical Information**

#### A. General Information

WARNING! Risk of Shock or Explosion! DO NOT wire 110-120 VAC to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

**NOTICE:** 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 C22.1.

- Wire the appliance junction box to unswitched 110-120 VAC. This is required for proper operation of the appliance.
- This appliance comes with a 110-120 VAC cord assembly. This is required for proper operation of the appliance (Intellifire™ Plus Ignition). An outlet box may be installed in a bottom back corner of the existing solid fuel masonry or factory built fireplace to plug in the cord assembly, or the supplied power cord may be routed out onto the hearth to a nearby outlet.
- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 110-120 VAC voltage cannot be shared within the same wall box.

# **Electrical Service and Repair**

**WARNING!** Risk of Shock! Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

**WARNING!** Risk of Shock! Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

 Refer to Service Parts section of appliance Owner's Manual for replacement part information.

# B. Wiring Requirements - Intellifire™ Plus Ignition System Wiring

 Wire an outlet box (110-120 VAC) in the bottom back corner of the existing solid fuel masonry or factory built fireplace to plug in the cord assembly, or the supplied cord assembly may be rerouted out onto the hearth to a nearby outlet for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! DO NOT wire IPI controlled appliance junction box to a switched circuit. Incorrect wiring will override IPI safety lockout.

- Refer to Figure 8.1, IPI Plus Wiring Diagram.
- This appliance is equipped with an IntelliFire™ Plus control valve which operates on a 6 volt/1.5 AMP system.
- Plug the 6 volt transformer plug into the appliance cord assembly to supply power to the unit OR install 4 AA cell batteries (not included) into the battery tray before use.
   See Section 3.I in Owner's Manual for instructions on locating battery tray and installing batteries.

#### **ON/OFF Switch**

- An ON/OFF switch is included with the appliance surround and should be attached to surround/facing. (See Installation instructions for remote control/fronts).
- If desired an additional wall switch or thermostat may be added to system.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Battery polarity must be correct when installing batteries. When using batteries as a power source, the 6 volt transformer must be unplugged from the receptacle.

Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service

# **IPI Battery Tray/Battery Installation**

The IntelliFire™ Plus system has a battery backup option. Batteries should only be placed in the battery pack when 110-120 VAC is not available. See Section 3.I of Owner's manual.

### **Control Module Operation**

See Section 3.J of Owner's Manual for control module operation instructions.

# C. Optional Accessories Requirements

- This appliance may be used with a wall switch, wall mounted thermostat, and/or a remote control. A factory -installed fan comes standard with the MDVI30IN/IL and MDVI35IN/IL.
- To connect optional accessories, the supplied cord assembly should be used.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

- Plug the cord into a convenient outlet.
- Must use cord supplied.

- An IntelliFire<sup>™</sup> Plus Wireless Controls or WSK-21 wired wall switch may be used with the IntelliFire<sup>™</sup> Plus Ignition System. Hearth & Home Technologies recommends that IntelliFire Plus<sup>™</sup> wireless controls be used for their features and functionality with the IntelliFire<sup>™</sup> Plus ignition system.
- A standard ON/OFF switch is compatible.

**WARNING!** Risk of Shock! Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

**WARNING!** Risk of Shock! Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

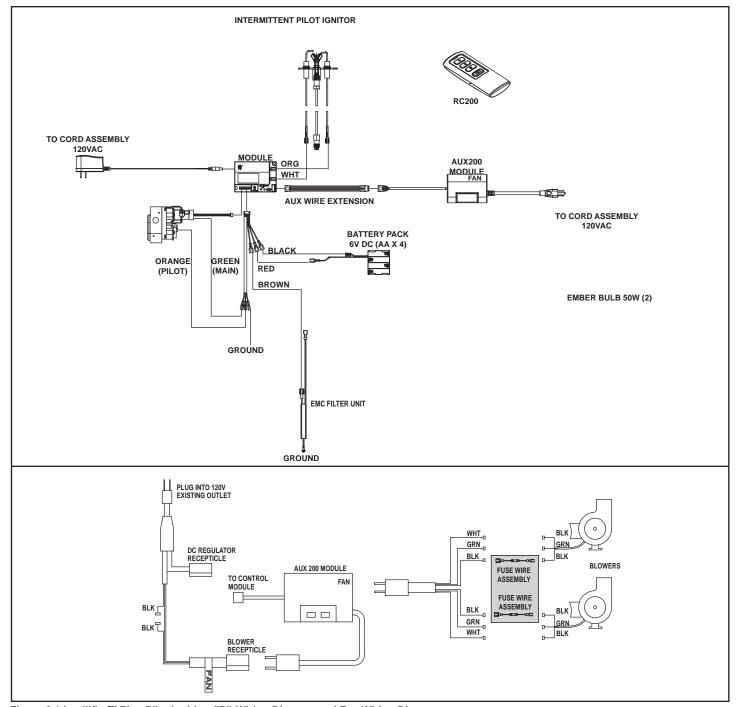


Figure 8.1 Intellifire™ Plus Pilot Ignition (IPI) Wiring Diagram and Fan Wiring Diagram

# **Gas Information**

#### A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

#### **B.** Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z223.1 National Fuel Gas Code in the USA and CAN/ CGA B149 in Canada.
- · Pressure requirements are:

Gas Pressure	Natural Gas	Propane
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum inlet pressure	10.0 in. w.c.	13.0 in. w.c.
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.

WARNING! Risk of Fire or Explosion! High pressure will damage valve. Low pressure may cause explosion.

- 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.

### **A** 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.

**Note:** Have the gas supply line installed in accordance with local 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 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

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

#### C. Gas Connection

- Refer to Reference Section 3 for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- The gap between supply piping and gas access hole may be caulked with caulk with a minimum of 300°F continuous exposure rating or stuffed with noncombustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

**WARNING!** Risk of Fire or Explosion! Support control when attaching pipe to prevent bending gas line.

• A small amount of air will be in the gas supply lines.

**WARNING!** Risk of Fire or Explosion! Gas build-up during line purge could ignite.

- Purge should be performed by qualified service technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

Light the 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! Risk of Fire, Explosion or Asphyxiation! Check all fittings and connections with a non-corrosive commercially available leak-check solution. DO NOT use open flame. Fittings and connections could have loosened during shipping and handling.

**WARNING!** Risk of Fire! DO NOT change valve settings. This valve has been preset at the factory.

### D. High Altitude Installations

**NOTICE:** If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

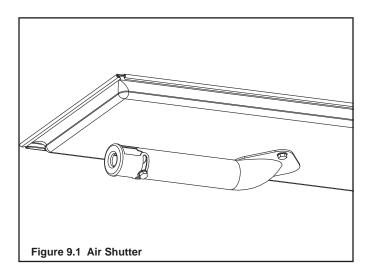
- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Input ratings are certified without a reduction of input rate for elevations up to 4500 feet (1370 m) above sea level. Please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4500 feet (1370 m).

Check with your local gas utility to determine proper orifice size.

# E. Air Shutter Setting

Air shutter settings should be adjusted by a qualified service technician at the time of installation. The air shutter is set at the factory for minimum vertical vent run. Adjust air shutter for longer vertical runs. See Figure 9.1.

**NOTICE:** If sooting occurs, provide more air by opening the air shutter.



### **Air Shutter Settings**

MDVI30IN	3/8 in.
MDVI35IN	3/8 in.
MDVI30IL	1/2 in.
MDVI35IL	1/2 in.

# 10 Finishing

# A. Mantel and Wall Projections

**WARNING!** Risk of Fire! Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).

Clearance to combustible material under the insert is 1/4 inch (6 mm). Clearance from top of fireplace opening for combustibles extending 12 inches max. is 12 inches.

 Use leveling legs to raise insert minimum 1/4 inch (6 mm) above combustible material or outer wrap of factory built firebox.

Combustible facings must not extend behind the insert surround. For non-combustible material specifications refer to section 1.E.

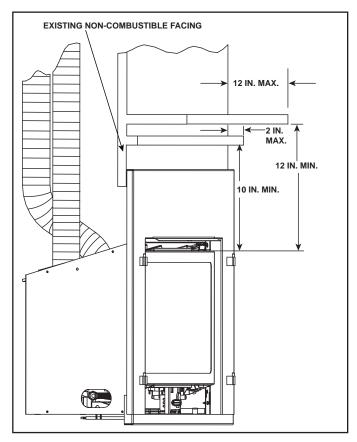


Figure 10.1 Mantel Clearance

# A. Fixed Glass Assembly

**WARNING!** Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- DO NOT strike, slam or scratch glass.
- DO NOT operate fireplace with glass removed, cracked, broken or scratched.
- · Replace as a complete assembly.

#### **Removing Fixed Glass Assembly**

**WARNING!** Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- DO NOT strike, slam or scratch glass.
- DO NOT operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.

# **CAUTION! Handle fixed glass assembly with care.** Glass is breakable.

- · Avoid striking, scratching or slamming glass
- · Avoid abrasive cleaners
- DO NOT clean glass while it is hot
- The glass assembly fastens to the fireplace in four places. Four of the fastening mechanisms are springloaded glass latches. An example of the glass latch is shown in Figure 11.1.
- To release glass assembly, pull the two bottom spring-loaded latches forward and allow them to retract away from the glass assembly. Slide the glass assembly outward and downward until the top latches disengage.

#### **Replacing Fixed Glass Assembly**

- Tilt glass assembly toward fireplace and slide glass assembly upward to engage top latches. Verify top latches are fully engaged and then fasten the two bottom latches.
- · Reinstall door or decorative front.

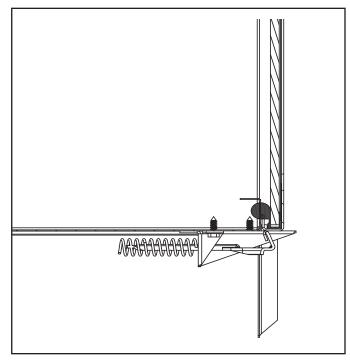


Figure 11.1 Fixed Glass Assembly

# B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox. Remove metal panels covering electrical components on sides of appliance.

**Note:** Remove the zip ties on the exterior sides of the appliance that hold the electrical cord in place for shipping.

# 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. Contact your dealer for a list of approved accessories.

**WARNING!** Risk of Fire and Electric Shock! Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.

#### E. Place the Lava Rock

**WARNING!** Risk of Explosion! Follow lava rock placement instructions in manual. **DO NOT** place lava rock on burner. Improperly placed lava rock interferes with proper burner operation.

Lava rock is shipped with this gas appliance. To place the lava rock:

- Lava rock CANNOT be placed on the burner.
- Place lava rock in front of and to the sides of the burner.

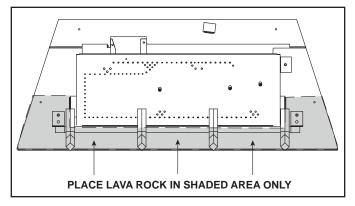


Figure 11.2 Placement of Lava Rock

#### F. Ember Placement

**WARNING!** Risk of Explosion! Follow ember placement instructions in manual. Replace ember material annually. Improperly placed embers interfere with proper burner operation.

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

- Embers CANNOT be placed directly over rear burner port as indicated in Figure 11.3(A) or in pilot area as indicated in Figure 11.3(B).
- Place dime-size pieces of Glowing Embers® just in front of the port trail in areas noted in Figure 11.3(A), but not on or in between those ports. Care should be taken so that those ports are not covered.
- Embers may be placed on the ports in areas indicated in Figure 11.3(D). These embers must be placed loosely over the port holes, not pressed down on or into the holes. Create a single layer, no more than 1/4 inch thick.
- 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.

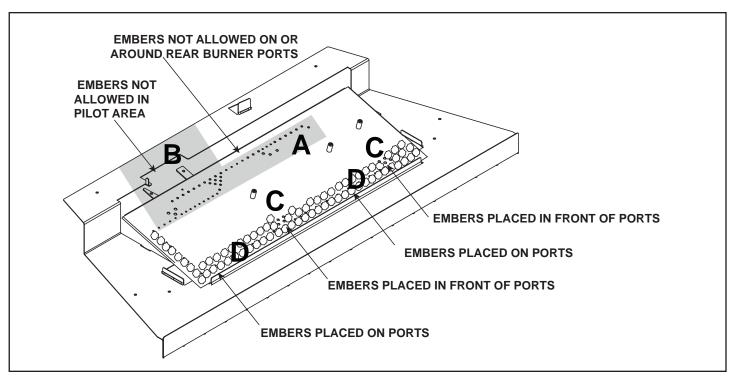


Figure 11.3 Placement of Embers

# G. Install the Log Assembly

Log Set Assembly: LOGSMDVI30

Models: MDVI30IN, MDVI30IL

# LOG PLACEMENT INSTRUCTIONS

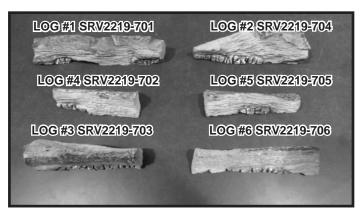


Figure 1. Log Set Components

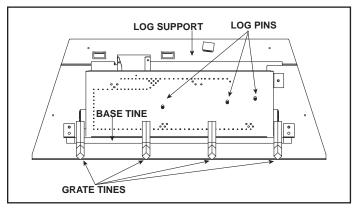


Figure 2. Log Placement Reference Points

**CAUTION:** Logs are fragile, handle with care. Log #1 (SRV2219-701) Before placing Log #1, fold up the rear tabs in the firebox basepan. A flathead screwdriver or pliers may be necessary. See Figure 3. Position Log #1 as shown in Figure 5. Place the slots on the bottom of the log over the basepan tabs. See Figure 4 for slot detail.

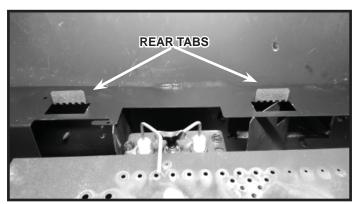


Figure 3. Rear Tabs

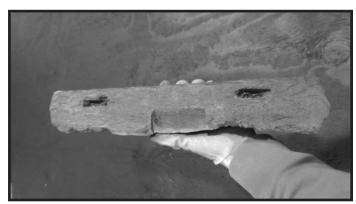


Figure 4. Log #1 Placement Slots



Figure 5. Log #1 Installed

**Log #2 (SRV2219-704)**: Note the location of the log pin placement holes on the bottom of Log #2, shown in Figure 6. Position Log #2 by placing over the two log pins located on the surface of the burner. Figure 7 shows Log #2 installed.

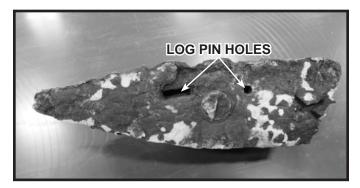


Figure 6. Log #2 Detail

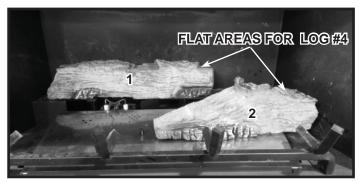


Figure 7. Log #2 Installed

**Log #3 (SRV2219-703)**: Note the location of the log pin placement hole and grate tine groove on the bottom of Log #3. See Figure 8. Position Log #3 as shown in Figure 9 by mating the hole on the bottom of Log #3 with the last log pin on the surface of the burner, adjusting placement on the grate tine as necessary for correct orientation.



Figure 8. Log #3 Detail



Figure 9. Log #3 Installed

**Log #4 (SRV2219-702)**: Note the flat areas on Log #1 and Log #2 highlighted in Figure 7. Position Log #4 by placing the left end of the log fully into the flat spot on Log #1 and then setting the other end of Log #4 in the flat spot on Log #2. See Figure 11.

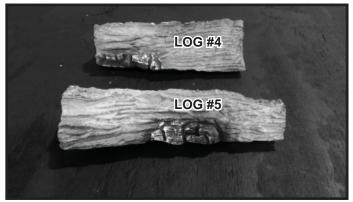


Figure 10. Log #4 and Log #5

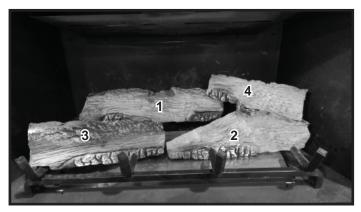


Figure 11. Log #4 Installed

**Log #5 (SRV2219-705):** Note the flat areas on Log #1 and Log #3 highlighted in Figure 9. Position Log #5 as shown in Figure 10 by placing the right face of the log fully against the end of the flat areas in Log #1 and Log #3. The end of the log will contact the back wall of the firebox.

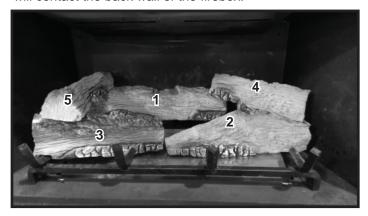


Figure 12. Log #5 Installed

**Log #6 (SRV2219-706):** Note the grate tine groove as shown in Figure 13 and the flat area highlighted in Figure 9. Position Log #6 as shown in Figure 14 by placing the grate tine groove into the grate tine and resting the log in the flat area on Log #2 (left side of log).



Figure 13. Log #6 Detail

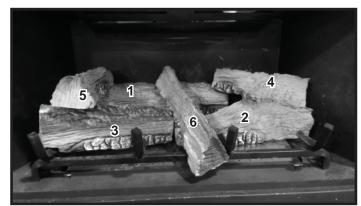


Figure 14. Log #6 Installed

2206-955C

# LOG PLACEMENT INSTRUCTIONS

Models: MDVI35IN, MDVI35IL

Log Set Assembly: LOGSMDVI35

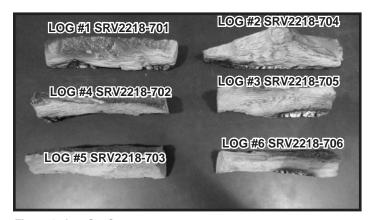


Figure 1. Log Set Components

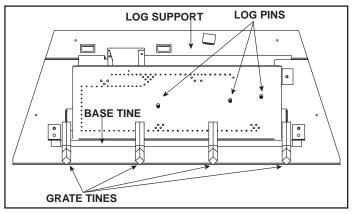


Figure 2. Log Placement Reference Points

CAUTION: Logs are fragile, handle with care. Log #1 (SRV2218-701) Before placing Log #1, fold up the rear tabs in the firebox basepan. A flathead screwdriver or pliers may be necessary. See Figure 3. Position Log #1 as shown in Figure 5. Place the slots on the bottom of the log over the basepan tabs. See Figure 4 for slot detail.

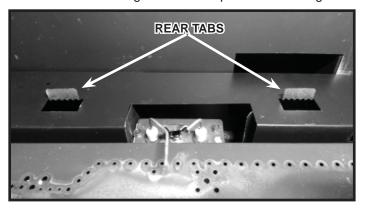


Figure 3. Rear Tabs



Figure 4. Log #1 Placement Slots

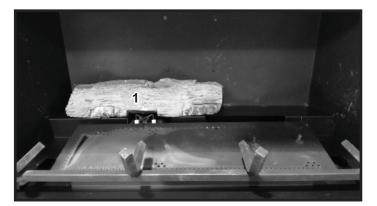


Figure 5. Log #1 Installed

**Log #2 (SRV2218-704)**: Note the location of the log pin placement holes on the bottom of Log #2, shown in Figure 6. Position Log #2 by placing over the two log pins located on the surface of the burner. Figure 7 shows Log #2 installed.

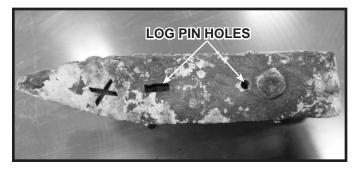


Figure 6. Log #2 Detail

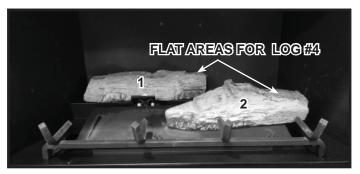


Figure 7. Log #2 Installed

**Log #3 (SRV2218-705)**: Note the location of the log pin placement hole and grate tine groove on the bottom of Log #3. Position Log #3 as shown in Figure 9 by mating the hole on the bottom of Log #3 with the last log pin on the surface of the burner, adjusting placement on the grate tine as necessary for correct orientation.

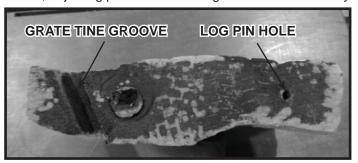


Figure 8. Log #3 Detail



Figure 9. Log #3 Installed

**Log #4 (SRV2218-702)**: Note the flat areas on Log #1 and Log #2 highlighted in Figure 7. Position Log #4 by placing the left end of the log fully into the flat area on Log #1. Set the other end of Log #4 in the flat spot on Log #2. See Figure 12. Note the differences between Log #4 and Log #6. Log #4 has bark across the entire back and a burnt section on the left, whereas Log #6 is only partly covered by bark and the burnt section is in the center of the log. See Figure 10 and Figure 11.

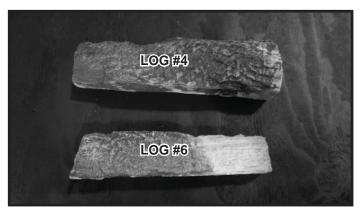


Figure 10. Log #4 and Log #6 - Back Views

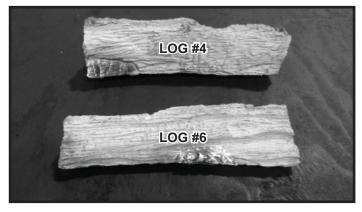


Figure 11. Log #4 and Log #6 - Front Views

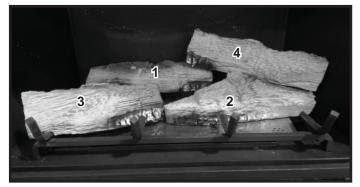
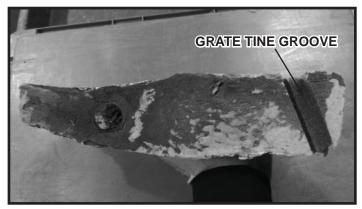


Figure 12. Log #4 installed

**Log #5 (SRV2218-703):** Note the location of the grate tine groove on the bottom of Log #5, shown in Figure 13. Position Log #5 as shown in Figure 14. The grate tine groove on the bottom of the log should rest fully on the grate. Rest the log in the flat area on Log #2.



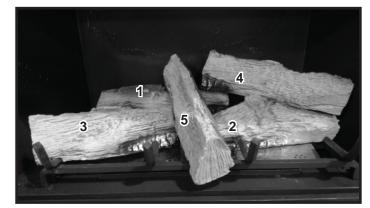


Figure 13. Log #5 Detail

Figure 14. Log #5 Installed

Log #6 (SRV2218-706): Note the locations of the flat areas on Log #1 and Log #3 highlighted in Figure 9. Position Log #6 as shown in Figure 15 by placing the right face of the log fully against the end of the flat areas in Log #1 and Log #3. The end of the log will contact the back wall of the firebox.



Figure 15. Log #6 Installed

2205-955C

#### H. Install Decorative Front/Surround

A decorative front is required to complete this installation. Installation instructions are included with the decorative fronts. Consult your dealer for a list of decorative front and surround options.

**WARNING!** Risk of Fire! Install ONLY doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts may cause fireplace to overheat.

This fireplace has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the fireplace 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.

For more information refer to the instructions supplied with your decorative front.

# A. Vent Components

Direct Vent Flex Liner Kits (see Figure 12.1)

LINK-DV30B: Masonry 3 inch flex liner kit. Expands to 30 feet. Includes: two liners, termination cap and flashing.

LINK-DV4-30B: Masonry 3 inch flex liner kit. Expands to 30 feet and 4 feet respectively. Includes: two liners, termination cap and flashing.

LINKSQC-DV30, LINKSQB-DV30: Masonry 3 inch flex liner kit. Expands to 30 feet. Includes: two liners, termination cap and flashing.

LINKSQC-DV4-30, LINKSQB-DV4-30: Masonry 3 inch flex liner kit. Expands to 30 feet and 4 feet respectively. Includes: two liners, termination cap and flashing.

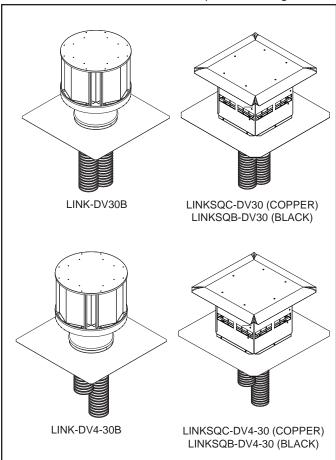


Figure 12.1 Direct Vent Flex Liner Kits

Direct Vent Flex Liner Accessory Kits. See Figure 12.2.

LINK-ZC-ADPB: Zero clearance chimney adapter

DV-46DVA-GK: Adapter kit - It is permissible to use DV-46DVA-GK to connect colinear flex vent to SL-D vent pipe to extend the run.

FLEX3-30: One 3 inch flexible liner expands to 30 feet.

FLEX-CNCT: Connector kit - 3 inch liner to 3 inch liner, one connector per kit.

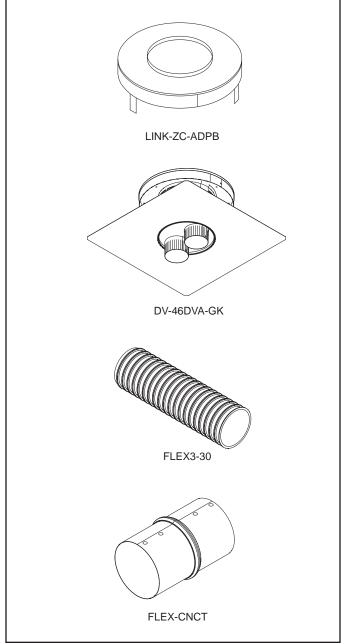


Figure 12.2 Direct Vent Flex Liner Accessory Kits

#### **B.** Accessories

# Remote Controls, Wall Controls and Wall Switches

An RC200 remote control system is included with this appliance. After a qualified service technician has installed the remote control, wall control or wall switch, follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

See your dealer if you have questions.

Majestic, a brand of Hearth & Home Technologies 7571 215<sup>th</sup> Street West, Lakeville, MN 55044 www.majesticproducts.com

Please contact your Majestic dealer with any questions or concerns.

For the location of your nearest Majestic dealer,
please visit www.majesticproducts.com.

Printed in U.S.A. - Copyright 2017