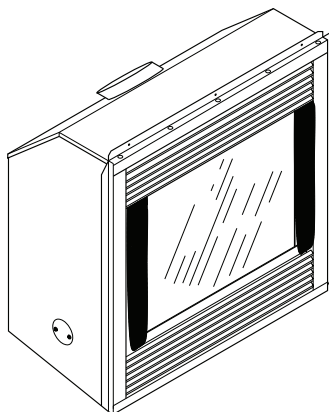




FMI PRODUCTS, LLC

DIRECT VENT FIREPLACE

OWNER'S OPERATION AND INSTALLATION MANUAL



NATIONAL
FIREPLACE
INSTITUTE



CERTIFIED
www.nficertified.org

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.

**MODELS CD36M-LS WITH FAN AND DOOR SWITCH
AND CD42M-LS WITH FAN**

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

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

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

For more information, visit www.fmiproductions.com

TABLE OF CONTENTS

Introduction.....	3	Operation.....	24
Selecting Location.....	3	Gas Conversion.....	26
Local Codes.....	4	Cleaning and Maintenance.....	27
Safety.....	4	Troubleshooting.....	29
Product Features.....	6	Specifications.....	33
Pre-Installation Preparation.....	6	Replacement Parts.....	33
Requirements for the Commonwealth of Massachusetts.....	9	Service Hints.....	33
Installation.....	10	Technical Service.....	33
Burner Flame Adjustment.....	23	Parts.....	34
		Accessories.....	38
		Limited Two Year Warranty.....	Back Cover

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

⚠ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

⚠ WARNING: This direct vent gas fireplace is intended for use with natural or propane/LP gas only. Do not attempt to burn any solid fuels in this appliance.

This fireplace may be installed as an OEM installation in a manufactured (mobile) home and must be installed in accordance with the manufacturers instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* in the United States or the *Mobile Home Standard, CAN/CSA Z240 MH Series*, in Canada. This fireplace is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the fireplace.

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

INTRODUCTION

⚠ WARNING: This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

Model CD36M-LS and CD42M-LS is a heat circulating gravity direct vent fireplace with sealed combustion chamber. This fireplace uses millivolt gas control valve and millivolt ignition system.

This fireplace is convertible with the standard setup as natural gas. Conversion may be performed by the OEM mobile home builder or by a qualified service person on-site. If you are uncertain as to what gas your unit is equipped for, please check the rating plate located inside of the appliance opening or consult your mobile home supplier or your local distributor of FMI PRODUCTS, LLC.

NOTICE: Check local building codes for area requirements before installing this appliance.

BEFORE YOU BEGIN

Before beginning the installation of your appliance, read these instructions through completely.

SELECTING LOCATION

To determine the safest and most efficient location for your fireplace, consider the following guidelines:

1. The location must allow for proper clearances (see Figure 1).
 - Flush installation is recommended where living space is limited.
 - Projected installation may be ideal for a new addition to an existing finished wall.
 - Corner installation makes use of a space that may not normally be used and provides a wider and more efficient range for radiant heat transfer.
2. Consider a location where the fireplace would not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that avoids the cutting of joists or roof rafters makes ventilation installation easier.

This FMI PRODUCTS, LLC fireplace and its components are safe when installed according to this installation manual and operated as recommended. Unless you use FMI PRODUCTS, LLC components designed and tested for this fireplace system, **YOU MAY CAUSE A SAFETY HAZARD!**

The FMI PRODUCTS, LLC warranty will be voided by, and FMI PRODUCTS, LLC disclaims any responsibility for the following actions:

- A) Modification to the fireplace, components, doors, blower, fans or vent system.
- B) Use of any component part not manufactured or approved by FMI PRODUCTS, LLC in combination with a FMI PRODUCTS, LLC fireplace system.

Proper installation is the most important step in ensuring safe and continuous operation of the fireplace. Consult the local building codes as to the particular requirements concerned with the installation of all factory built fireplaces. This fireplace, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*.

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1*. This appliance complies with ANSI Z21.88.

In selecting a location, the following precautions must be observed:

- Do not connect this appliance to a chimney system used for solid fuel burning fireplace.
- Due to high temperatures, do not locate this appliance in high traffic areas or near furniture and draperies.

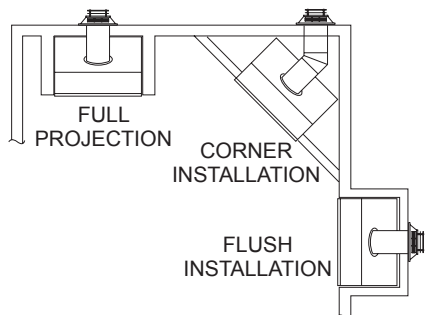


Figure 1 - Common Fireplace Locations

SELECTING LOCATION

Continued

- Never obstruct openings of the appliance or flow of ventilation air. Keep control compartments accessible.
- Do not locate appliance close to where gasoline or other flammable liquids may be stored. The appliance must be kept clear and free from combustible materials.
- Do not use this appliance if any part has been under water. Immediately contact a local service technician to examine the appliance and to replace any part(s) of the control ignition system and other related components that have been submerged under water.

LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence to local codes, use the current *National Fuel Gas Code ANSI Z223.1/NFPA 54** (USA) or the current *CSA-B149.1 Installation Code* (Canada).

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

SAFETY



DANGER: Carbon monoxide poisoning may lead to death!

This fireplace must be installed by the O.E.M. builder or by a qualified (certified or licensed) service person. It has a sealed gas combustion chamber that uses a coaxial pipe (pipe within a pipe and having the same center) venting system. It brings in fresh air for combustion through the outer pipe and combustion gases are exhausted through the inner pipe. If the glass door assembly and venting pipe are not properly seated, connected and sealed, carbon monoxide leakage (spillage) can occur.

This fireplace complies with the National Safety Standards and is listed and tested by PFS Corporation to *ANSI Z21.50/CSA 2.22* standard as vented gas fireplace.

NOTICE: Decorative product not for use as a heating appliance.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness or nausea. If you have these signs, the fireplace may not be working properly. **Get fresh air at once!** Have fireplace serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

Propane/LP & Natural Gas: Propane/LP and natural gas are odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even

though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.



WARNING: Any change to this fireplace or it's controls can be dangerous. Do not modify this fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.



WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.



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



WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

SAFETY

Continued

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

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the appliance.

Do not use this fireplace to cook food or burn paper or other flammable material.

This fireplace reaches high temperatures. Keep children and adults away from hot surface to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surface to cool before touching.

WARNING



**HOT GLASS WILL
CAUSE BURNS.**

**DO NOT TOUCH GLASS
UNTIL COOLED.**

**NEVER ALLOW CHILDREN
TO TOUCH GLASS.**

Carefully supervise young children when they are in the room with fireplace.

Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor or liquids. Do not run fireplace where these are used or stored.

1. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
2. If you smell gas
 - shut off gas supply
 - 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.
3. Never install the fireplace
 - in windy or drafty areas where curtains or other combustible (flammable) objects can make contact with the fireplace front
 - in high traffic areas
4. Turn fireplace off and let cool before servicing, installing or repairing. Only a qualified service person should install, service or repair this fireplace. Have fireplace inspected annually by a qualified service person.
5. You must keep control compartments, burners and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.

SAFETY

Continued

6. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired.
7. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
8. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code*, *ANSI/NFPA 70*.
9. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
10. Do not operate fireplace if any log is broken.
11. Do not operate fireplace with glass door removed, cracked or broken.
12. Provide adequate clearances around air openings.

PRODUCT FEATURES

These are a few facts that can help you understand and enjoy your direct-vent fireplace:

- The venting system may be routed to the outside of your home in several ways. It may vent through the roof (vertical) or it may vent to an outside/exterior wall (horizontal). The vent pipe installation is very important to allow for proper operation. You must follow the venting instructions very carefully for either vertical or horizontal applications.
- This fireplace may be installed in any room of your house provided all local codes and these installation instructions are followed.
- A piezo ignitor and ceramic electrode create spark to ignite the pilot light. It does not require any matches, batteries or any other sources of ignition to light the pilot.
- Each time you turn on your fireplace, you may notice some amount of condensation on the inside of the fireplace glass. This is normal and will disappear after 10-20 minutes of operation.
- Your direct-vent gas fireplace system (fireplace and venting) is a balanced and sealed gas operating unit. It requires approximately 10-20 minutes of operating time before the flame pattern stabilizes.
- This fireplace is equipped with a millivolt gas control system that does not require electricity to operate. A piezo ignitor is provided to light the pilot without using matches or lighters.
- This model can accept an optional circulating air blower when 120 VAC connection is supplied. If you plan to install an optional blower, do not forget to wire the fireplace outlet when framing.

PRE-INSTALLATION PREPARATION



CAUTION: Do not block required air spaces with insulation or any other material. Do not obstruct the effective opening of the appliance with any type of facing material.

CLEARANCES TO COMBUSTIBLES

Minimum clearances to combustibles for the fireplace are:

- Back and Sides of Fireplace 0"
- Floor 0"
- Perpendicular Wall 6"
- Front 36"
- Top of Standoffs. 0"

MANTEL CLEARANCES

Woodwork, such as wood trims, mantles and other combustible materials should be placed within the required clearance specified in Figure 2.

Mantel Depth	Mantel From Top of Opening
(1) 14"	(A) 16"
(2) 12"	(B) 14"
(3) 10"	(C) 12"
(4) 8"	(D) 10"
(5) 6"	(E) 8"
(6) 4"	(F) 6"
(7) 2"	(G) 4"

PRE-INSTALLATION PREPARATION

Continued

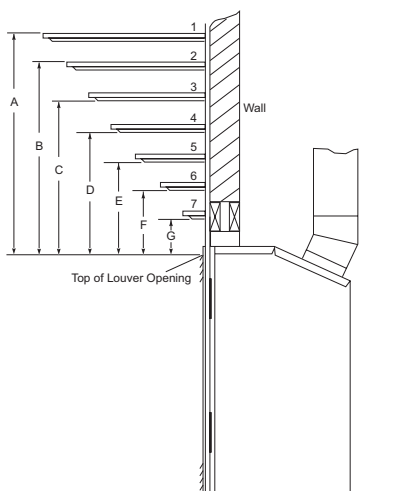


Figure 2 - Mantel Clearances

VENT TERMINATION CLEARANCES

Final position of your fireplace depends on location of the vent termination in relation to clearances that must be observed as shown in Figure 5 on page 8.

The vent system serves as the “chimney” as well as combustion air supply (air intake). The horizontal run must have a rise of 1/4" (0.6 cm) for every 12" (30.48 cm) of horizontal run towards the termination. Maximum horizontal run depends on vertical rise from fireplace adapter collar to vent termination (see table below).

VERTICAL		HORIZONTAL
0	to	1 ft (30.48 cm)
1 ft (30.48 cm)	to	4 ft (121.92 cm)
2 ft (60.96 cm)	to	8 ft (243.84 cm)
3 ft (91.44 cm)	to	12 ft (365.76 cm)
4 ft (121.92 cm)	to	16 ft (487.68 cm)
5 ft (152.40 cm)	to	15 ft (457.20 cm)
6 ft (182.88 cm)	to	14 ft (426.72 cm)
7 ft (213.36 cm)	to	13 ft (396.24 cm)
8 ft (243.84 cm)	to	12 ft (365.76 cm)

⚠ WARNING: Never allow the vent to run downward as this may cause excessive temperatures which could cause a fire.

⚠ WARNING: Horizontal sections of this vent system require a minimum clearance of 2" from the top of the pipe and 1" minimum to the sides and bottom. Vertical sections of this system require a minimum of 1" clearance to combustible materials on all sides of the pipe.

FRAMING

Once the final location has been determined, observing height clearances for vent termination, you may construct framing using dimensions shown in Figures 3 and 4, depending on your installation. If the appliance is to be installed directly on carpeting, tile (other than ceramic) or any combustible material other than wood flooring, appliance must be installed on a metal or wood panel extending full width and depth of the appliance.

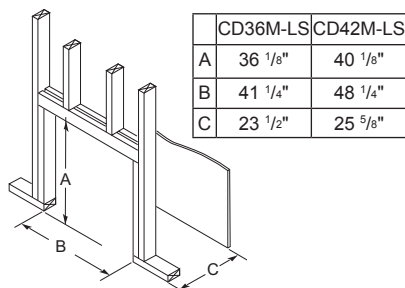
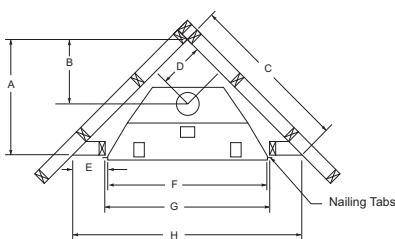


Figure 3 - Framing Dimension

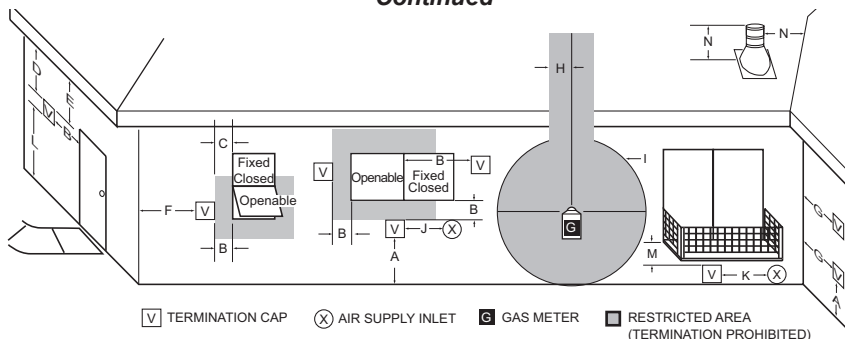


	CD36M-LS	CD42M-LS
A	35 3/4"	41 5/8"
B	15"	21 5/8"
C	49 5/8"	58 1/2"
D	10 3/8"	13 1/2"
E	13 3/4"	16 3/4"
F	41"	48"
G	41 1/4"	48 1/4"
H	68 1/2"	81 1/2"

Figure 4 - Corner Installation

PRE-INSTALLATION PREPARATION

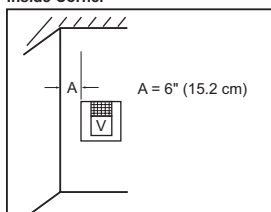
Continued



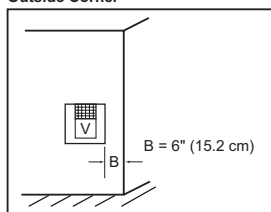
- A** = clearance above grade, veranda, porch, deck, or balcony [*12" (30.5 cm) minimum]
B = clearance to window or door that may be opened [6" (15 cm) min. for 10,000 Btu or less; 9" (23 cm) in US if between 10,000 and 50,000; 12" (30 cm) in Canada if between 10,000 and 100,000; 12" (30 cm) in US if greater than 50,000, 36" (91 cm) in Canada if greater than 100,000]
C = clearance to permanently closed window [minimum 12" (30.5 cm) recommended to prevent condensation on window]
D = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24" (61 cm) from the center-line of the terminal [18" (45.7 cm) minimum]
E = clearance to unventilated soffit [12" (30.5 cm) minimum]
F = clearance to outside corner (see below)
G = clearance to inside corner (see below)
H = *not to be installed above a meter/regulator assembly within 36" (91.4 cm) horizontally from the center line of the regulator
I = clearance to service regulator vent outlet [*72" (182.9 cm) minimum]
J = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other fireplace [6" (15 cm) min. for 10,000 Btu or less; 9" (23 cm) in US if between 10,000 and 50,000; 12" (30 cm) in Canada if between 10,000 and 100,000; 12" (30 cm) in US if greater than 50,000, 36" (91 cm) in Canada if greater than 100,000]
K = clearance to a mechanical air supply inlet [*In Canada, 6 ft. (1.83m) minimum; In US 3 ft. (91 cm) above if within 10 ft. (3 m) horizontally]
L = † clearance above paved side-walk or a paved driveway located on public property [*84" (213.3 cm) minimum]
M = clearance under veranda, porch, deck [*12" (30.5 cm) minimum ‡]
N = clearance above a roof shall extend a minimum of 24" (61 cm) above the highest point when it passes through the roof surface and any other obstruction within a horizontal distance of 18" (45.7 cm)
- † vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings*
 ‡ only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor*
 * as specified in CAN/CSA B149 (.1 or .2) Installation Codes (1991) for Canada and U.S.A.
 Note: Local codes or regulations may require different clearances

Termination Clearances for Buildings with Combustible and Noncombustible Exteriors

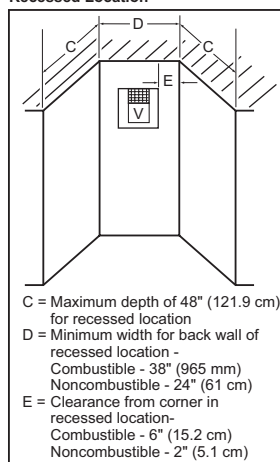
Inside Corner



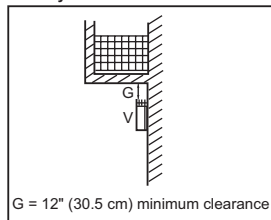
Outside Corner



Recessed Location



Balcony with No Side Wall



Balcony with Perpendicular Side Wall

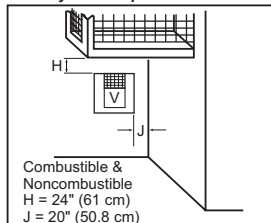


Figure 5 - Minimum Clearances for Vent Terminations

REQUIREMENTS FOR THE COMMONWEALTH OF MASSACHUSETTS

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

INSTALLATION OF CARBON MONOXIDE DETECTORS

At the time of installation of the side wall horizontally vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery backup is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

SIGNAGE

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than 1/2" in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

INSPECTION

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a) 1 through 4.

EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a) 1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System Not Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

INSTALLATION

⚠ WARNING: Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

NOTICE: Failure to follow these instructions will void the warranty.

VENTING INSTALLATION PRECAUTIONS

Consult local building codes before beginning installation. Installer must make sure to select proper vent system for installation. Before installing vent kit, installer must read this fireplace manual and vent kit instructions.

Only a qualified service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection
- Use extreme caution when using ladders or when on roof tops
- Be aware of electrical wiring locations in walls and ceilings

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component
- Unauthorized modification of the venting system
- Installation of any component part not manufactured or approved for use with the fireplace.
- Installation other than as instructed by these instructions

NOTICE: All FMI PRODUCTS, LLC direct vent fireplaces only approved 5/8" pipe components and terminations.

⚠ WARNING: This gas fireplace and vent assembly must be vented directly to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

⚠ WARNING: Horizontal sections of this vent system require a minimum clearance of 2" from the top of the pipe and 1" minimum to the sides and bottom. Vertical sections of this system require a minimum of 1" clearance to combustible materials on all sides of the pipe.

VENTING INSTALLATION

1. Install elbow to fireplace collar adapter located on back of the unit at a 45° angle. Slide elbow over collar and twist to lock. Check to insure proper connection (see Figure 6).
2. Continue to install remainder of pipe for desired installation. Make sure each section is twist-locked securely.
3. When installation of vent pipe is complete, in stall vent termination. Depending on location of your fireplace, you will vent vertically or horizontally.
4. Allow 1" of pipe to protrude from internal wall, depending on wall thickness. See Figure 7, page 11.

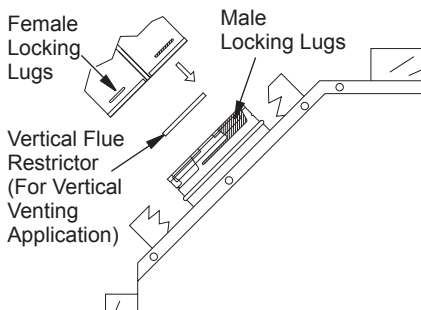


Figure 6 - Venting Installation

INSTALLATION

Continued

5. **For horizontal installation**, an optional siding standoff may be installed between vent cap and exterior wall. Secure horizontal vent cap to standoff. Secure standoff/vent cap assembly to wall (see Figure 7). Do not seal termination to vent pipe. Vent termination must be removable for service pipe inspection.
6. **For vertical installation**, a vertical termination is available. A vertical flue restrictor must be installed into inner collar of fireplace as shown in Figure 6, page 10. When installing a length of pipe for vertical termination that is over 3 ft., support pipe every 3 ft. using metal wall straps. Vertical to horizontal pipe must be kept at a 1 ft. to 4 ft. ratio with a maximum run of no more than 20 ft.

If an offset is necessary in attic to avoid obstruction, it is important to support vent pipe every 3 ft. to avoid excessive stress on elbows and possible separation (see Figure 8).

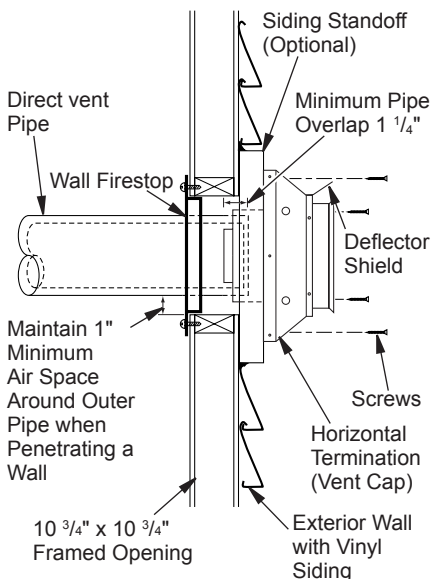


Figure 7 - Vent Termination (Horizontal)

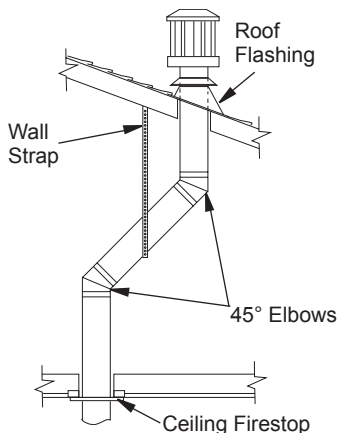


Figure 8 - Vertical Termination with Offset and Wall Strap

Horizontal Termination Configurations

Figures 9 through 13, pages 12 and 13 show different configurations and alternatives for venting with horizontal termination. Each figure includes a chart with critical minimum and maximum dimensions which **MUST** be met. **IMPORTANT:** Remember that a horizontal run of venting must have a 1/4" rise for every 12" of run toward termination.

⚠ WARNING: Never run vent downward as this may cause excessive temperatures which could cause a fire. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

GROUND FLOOR INSTALLATION

Recommended Applications:

- Installation using cabinet surrounds
- Through the wall using round or square termination (up to 12" horizontal pipe)
- NOT FOR CORNER INSTALLATION

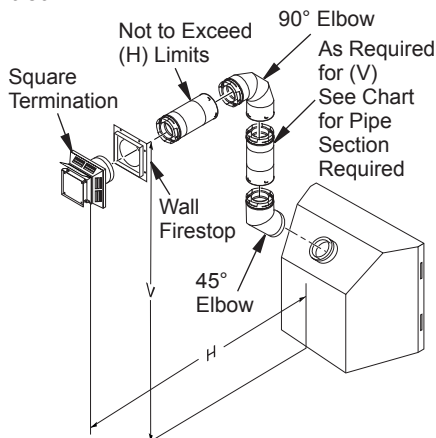
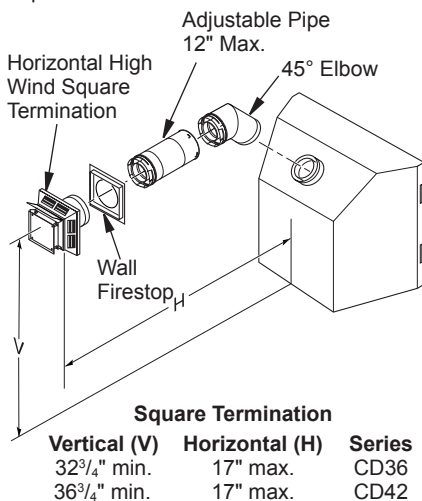
INSTALLATION

Continued

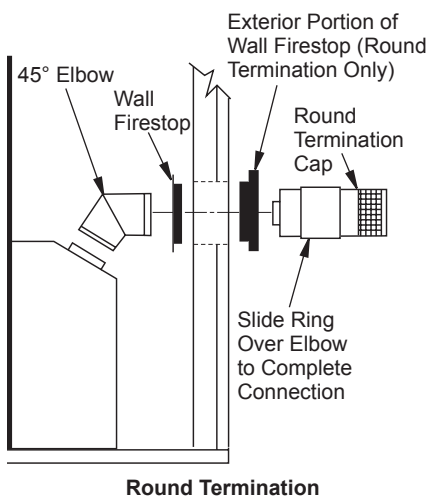
TYPICAL CORNER INSTALLATION

Recommended Applications:

- Corner ground floor installation
- Ground floor installation where pipe vents horizontally through wall (over 12" horizontal pipe)
- Basement installation where one foot clearance from ground to termination is possible



CD36 Series Vertical (V) Minimum	CD42 Series Vertical (V) Minimum	Required Vertical Pipe	Horizontal (H) Maximum
*43 ¹ / ₂ "	*46 ¹ / ₄ "	None	30"
54 ¹ / ₂ "	57 ¹ / ₄ "	1 ft.	48"
66 ¹ / ₂ "	69 ¹ / ₄ "	2 ft.	60"
78 ¹ / ₂ "	81 ¹ / ₄ "	3 ft.	84"
90 ¹ / ₂ "	93 ¹ / ₄ "	4 ft.	20'



Round Termination

Figure 9 - Horizontal Termination Configuration for Square and Round Terminations

*Note: Ground Floor Corner Venting

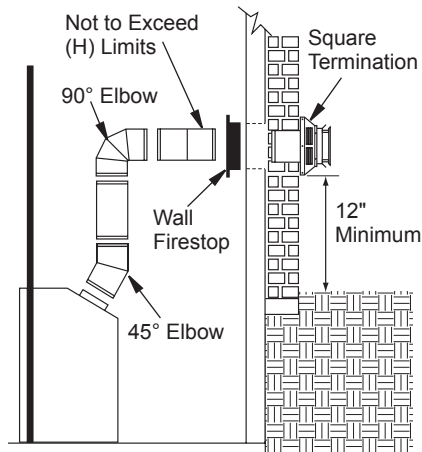


Figure 10 - Horizontal Termination Configuration for Corner Installation Using One 90° Elbow

INSTALLATION

Continued

HORIZONTAL SYSTEM INSTALLATION USING TWO 90° ELBOWS

The following configurations show the minimum vertical rise requirements for a horizontal system using two 90° elbows.

Venting with Two 90° Elbows

Vertical (V)	Horizontal (H ₁)	Horizontal (H ₁) + Horizontal (H ₂)
5' min.	2' max.	6' max.
6' min.	4' max.	12' max.
7' min.	6' max.	18' max.
8' min.	8' max.	20' max.
20' max.	8' max.	20' max.

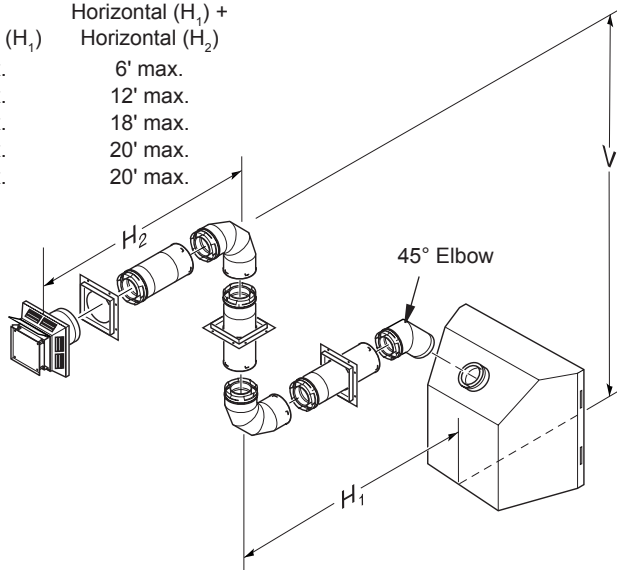


Figure 11 - Horizontal Termination Configuration for Venting Using Two 90° Elbows

Venting with Two 90° Elbows

Vertical (V)	Horizontal (H ₁) + Horizontal (H ₂)
5' min.	6' max.
6' min.	12' max.
7' min.	18' max.
8' min.	20' max.
20' max.	20' max.

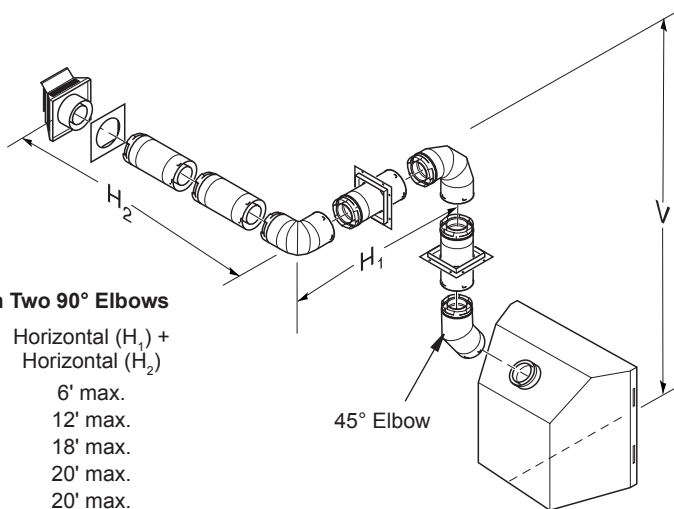


Figure 12 - Horizontal Termination Configuration for Venting Using Two 90° Elbows with Termination at 90° with Fireplace

INSTALLATION

Continued

INSTALLATION FOR VERTICAL TERMINATION

Note: Vertical restrictor must be installed in all vertical installations.

1. Determine the route your vertical venting will take. If ceiling joists, roof rafters, or other framing will obstruct venting system, consider an offset (see Figure 13) to avoid cutting load bearing members.

Note: Pay special attention to these installation instructions for required clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, etc. Do not pack air spaces with insulation. Also note maximum vertical rise of venting system and any maximum horizontal offset limitations.

2. Set fireplace in desired location. Drop a plumb line down from ceiling to position of fireplace exit flue. Mark center point where vent will penetrate ceiling. Drill a small locating hole at this point. Drop a plumb line from inside roof to locating hole in ceiling. Mark center point where vent will penetrate roof. Drill a small locating hole at this point.

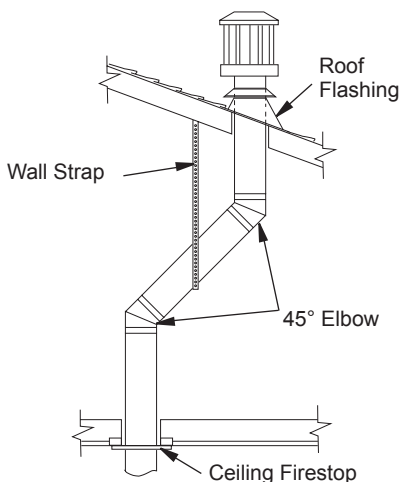


Figure 13 - Offset with Wall Strap and 45° Elbows

Vertical Termination Configurations

Figures 14 through 17 show four different configurations for vertical termination.

Venting with Two 90° Elbows

Vertical (V)	Horizontal (H_1) + Horizontal (H_2)
5' min.	2' max.
6' min.	4' max.
7' min.	6' max.
8' min.	8' max.
20' max.	8' max.

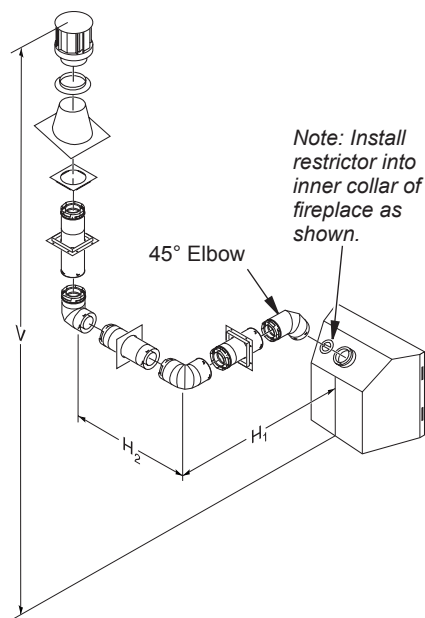


Figure 14 - Vertical Venting Configuration Using Two 90° Elbows with Two Horizontal Runs (Vertical Round High Wind Termination Shown)

INSTALLATION

Continued

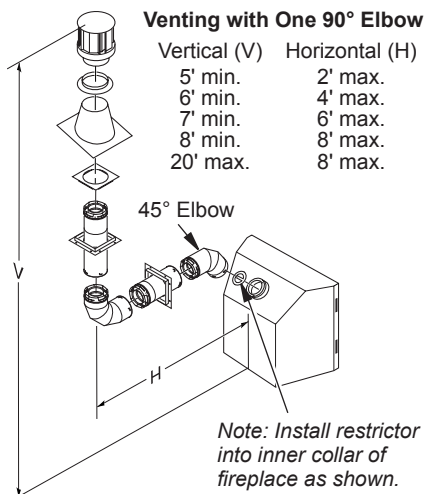


Figure 15 - Vertical Venting Configuration Using One 90° Elbow (Vertical Round High Wind Termination Shown)

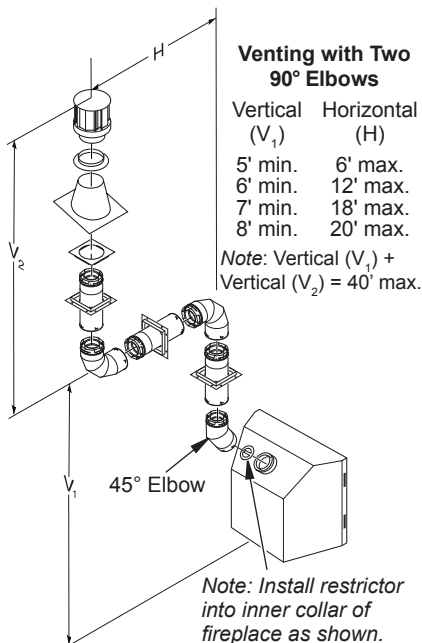


Figure 16 - Vertical Venting Configuration Using Two 90° Elbows (Vertical Round High Wind Termination Shown)

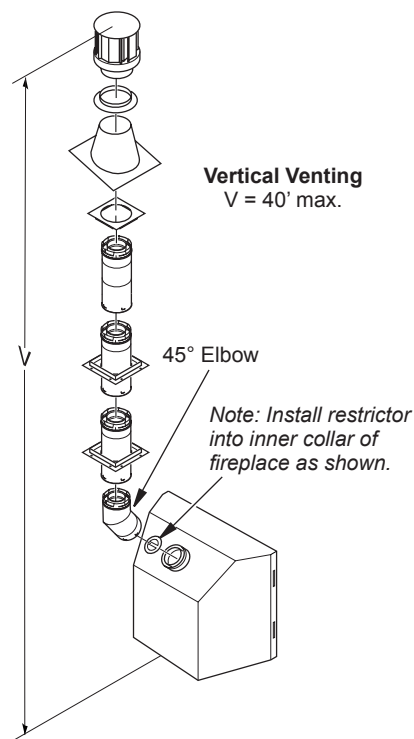


Figure 17 - Vertical Venting Configuration With No Horizontal Run (Vertical Round High Wind Termination Shown)

ELECTRICAL HOOKUP AND REMOTE RECEIVER DIAGRAM

An outlet box with two receptacles (see Figure 18) has been supplied for your convenience and is located inside on the lower right side of the fireplace.

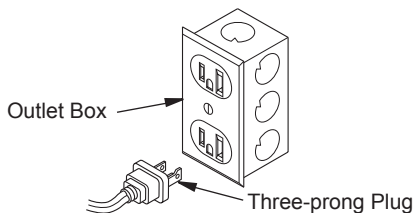


Figure 18 - Duplex Outlet

INSTALLATION

Continued

The remote control receiver is factory wired and connected to the convertible gas valve as shown in Figure 19.

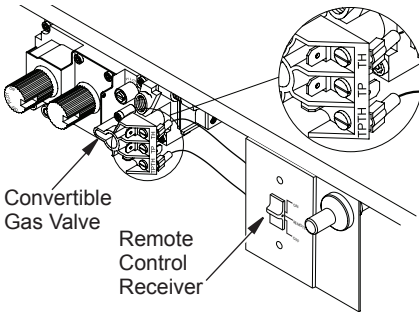


Figure 19 - Remote Control Receiver

GAS SUPPLY TESTING

NOTICE: This section is intended as a guide for qualified technicians installing gas to the appliance.

WARNING: Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be created.

Appliance and its individual shutoff valve must be disconnected from gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

Appliance must be isolated from gas supply piping system by closing its individual shutoff valve during any pressure testing of gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

Gas control valve is secured under firebox. Two 1/8" ports are provided on gas control valve for pressure test gauge connections (see Figure 20).

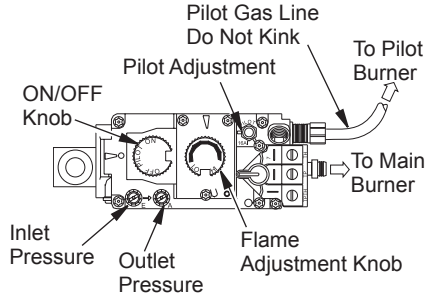


Figure 20 - Gas Control Valve

GAS LINE HOOK-UP

WARNING: Gas line hook-up should be done by your gas supplier or a qualified service person.

WARNING: Before you proceed, make sure your gas supply is OFF.

An equipment shutoff valve has been included in fireplace's gas supply system. Consider installing an extra shutoff valve outside appliance's enclosure (check local codes), where it can be accessed more conveniently with a key through a wall as shown in Figure 21.

In conformance with local codes, route a 1/2" NPT gas line towards appliance coming in from bottom, left or right side of fireplace (see Figure 22, page 17).

Install a sediment trap between incoming gas line and gas control box (see Figure 23, page 17). The sediment trap should extend down a minimum of 3" (7.62 cm) beyond center of pipe.

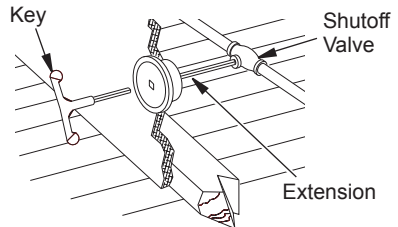


Figure 21- Typical Exterior Wall Gas Shutoff Installation

INSTALLATION

Continued

When routing gas line through conduit sleeve, make sure to repack insulation to fill gaps between gas line and conduit sleeve. Compounds used on threaded joints of gas piping shall be resistant to the action of propane or natural gas. Compounds should be applied lightly to ensure excess sealant does not enter gas line.

Complete your gas line installation by connecting incoming gas line to flexible gas line. Secure tightly with a wrench but do not over-tighten.

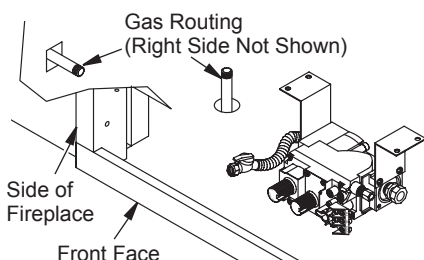


Figure 22 - Gas Line Routing

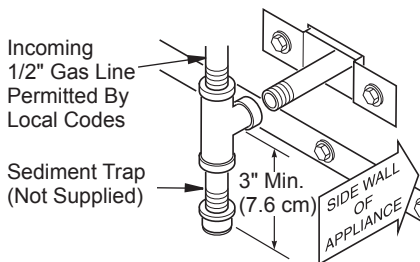


Figure 23 - Sediment Trap

CHECKING GAS CONNECTIONS

⚠ WARNING: All gas piping and connections must be tested for leaks after the installation is completed.

Never use an open flame to check for a leak. After ensuring that the gas valve is open apply commercial leak detection fluid to all gas joints. Bubbles forming show a leak. Correct all leaks at once.

Do not operate any appliance if a leak is detected.

PILOT ADJUSTMENT

The pilot or electrode assembly is factory preset for proper flame height. Alterations to these settings may have occurred during shipping and handling. If this is the case, some minor readjustments may be necessary and should be done by a qualified service technician. The proper settings for thermopile height should be at a distance of 3/8" (0.95 cm) to 1/2" (1.27 cm) from pilot flame as shown in Figure 24.

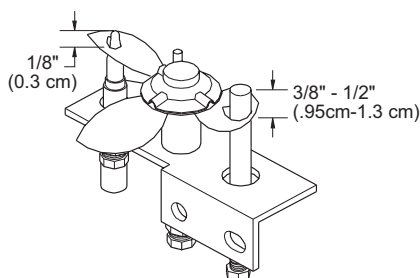
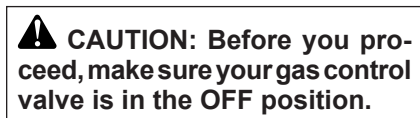


Figure 24 - Pilot Assembly

INSTALLATION

Continued

REMOVING GLASS PANEL



1. To remove louvers, pull both spring latches (located in each end of louver) toward center of appliance at the same time until disengaged from locating holes. Repeat for bottom end spring latches (see Figure 25).

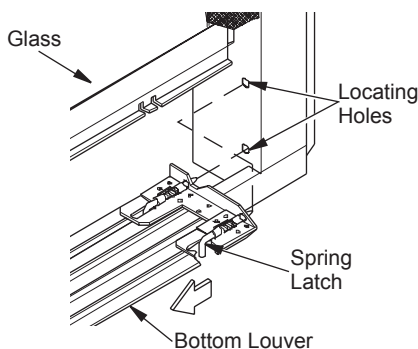


Figure 25 - Removing Louvers

2. Remove screen rod by removing rod loop from glass door center bracket. Slide screen rod to left or right of fireplace until one end is free to completely remove screen from fireplace.
3. Undo latches located on top and bottom of firebox (see Figure 26). Carefully swing door to the left. Glass door is securely mounted to firebox with 5 screws.

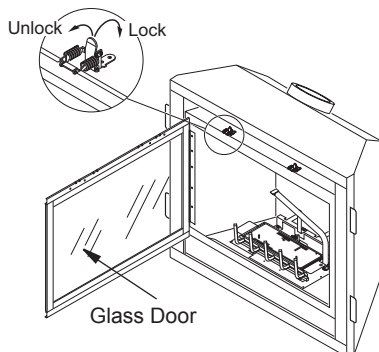


Figure 26 - Opening Glass Door

INSTALLING OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL MRC SERIES

NOTICE: Use only alkaline batteries (not included).

Installing Remote Receiver

1. Open bottom louver and locate switch bracket on the right.
2. Remote receiver can be placed in the hole on the switch bracket or placed on the floor underneath the firebox, see Figure 27. See remote instructions for further information.
3. Attach terminal wires to battery.
4. Connect wires from receiver to TH and TPTH to control valve (see Figure 28).

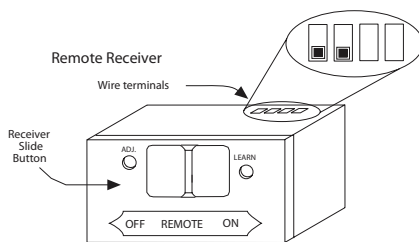


Figure 27 - Remote Receiver

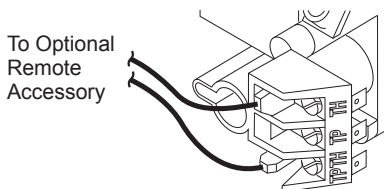


Figure 28 - Control Valve Terminals

INSTALLATION

Continued

INSTALLING LOGS, LAVA ROCK AND GLOWING EMBERS

It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with fireplace.

Open louvers, remove screen, unlock door latches, and open glass door. See *Removing Glass Panel*, steps 1 to 3, page 18. Install logs according to instructions for fireplace model numbers.

1. Find and place log #1 (rear log) on top of grate. Make sure notches in bottom of log fit over grate (see Figure 29).

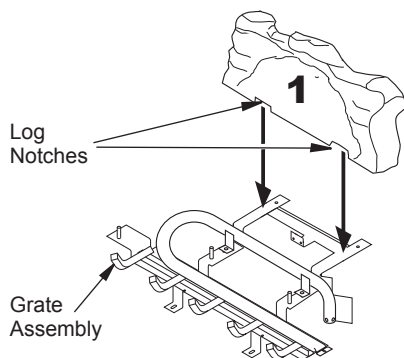


Figure 29 - Installing Log No. 1

2. Rest log #2 (front log) on pins on front part of grate (see Figure 30).

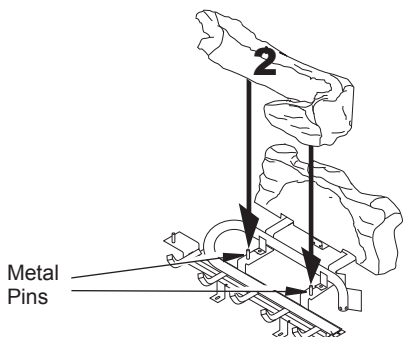


Figure 30 - Installing Log No. 2

3. Place log #3 (crossover log) onto rear and front logs. Make sure it is seated properly on surface of rear log and pin on front log as shown in Figure 31.

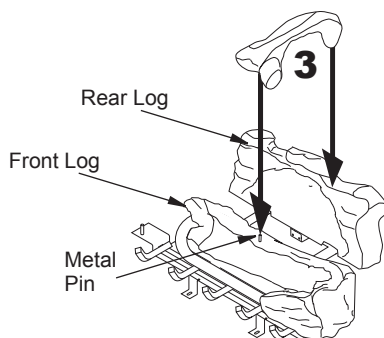


Figure 31 - Installing Log No. 3

4. Place log #4 (right log) onto log landing on right side of front log as shown in Figure 32.

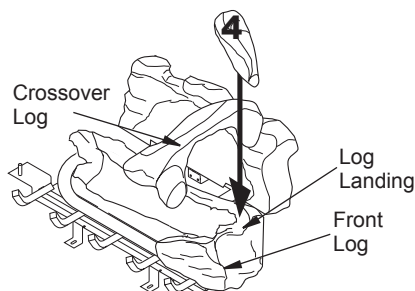


Figure 32 - Installing Log No. 4

5. Place log #5 (base log) onto front left part of grate making sure notch and hole fit over metal pin and prong of grate. See Figure 33.
6. Place log #6 (left log) onto rear log landing and resting it on top of front log. See Figure 33.

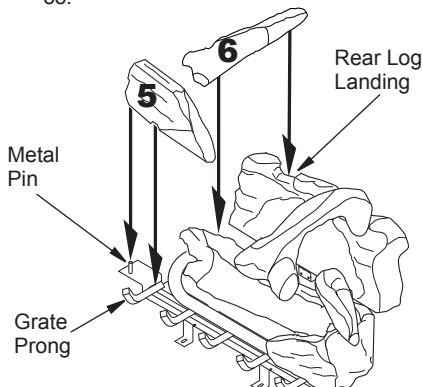


Figure 33 - Installing Logs No. 5 and No. 6

INSTALLATION

Continued

Model CD42M-LS Series

1. Place log #1 (small base log) onto pin on left side of grate extension (see Figure 34).
2. Rest left side of log #2 (front log) on top of log #1 and right side onto pin located on right side of grate extension (see Figure 35).

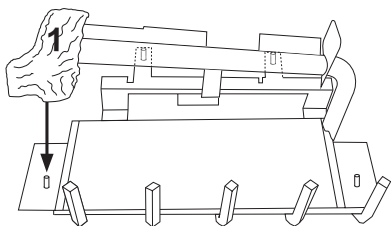


Figure 34 - Installing Log #1, Model CD42M-LS

3. Place log #3 (rear log) onto pins on rear of grate (see Figure 36).
4. Place log #4 (crossover log) onto pins from both logs #2 and #3 (see Figure 37).
5. Place log #5 (top log) onto right pin of front log (#2) and smooth surface of rear log (#3). Make sure it is seated properly (see Figure 38).

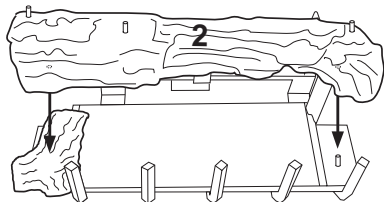


Figure 35 - Installing Log #2, Model CD42M-LS

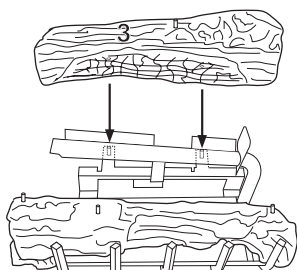


Figure 36 - Installing Log #3, Model CD42M-LS

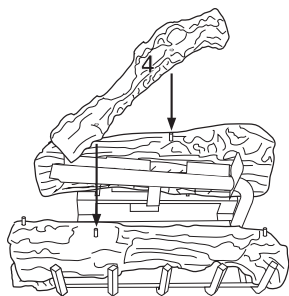


Figure 37 - Installing Log #4, Model CD42M-LS

6. Place log #6 (left log) on left pin of front log (#2) and smooth surface of rear log (#3). Make sure it is seated properly (see Figure 39*).
7. Place log #7 (right log) on right pin of top log (#5). Make sure it is seated properly (see Figure 39).

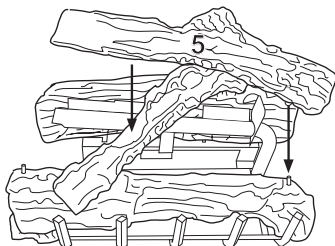


Figure 38 - Installing Log #5, Model CD42M-LS

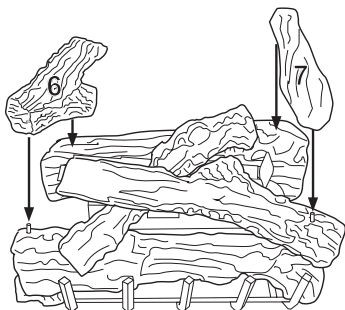


Figure 39 - Installing Logs #6 and #7, Model CD42M-LS

INSTALLATION

Continued

Lava Rock and Ember Material

1. For all models, place lava rock along sides and front of firebox bottom in areas that are visible. It is not necessary to use all lava rock provided.

NOTICE: Do not put lava rock on or under burner. Placing lava rock on burner could cause performance problems.

2. Pull ember material apart into pieces no larger than a dime. Place loosely and directly onto exposed section of front burner and along space between burner and grate prongs. These will create glowing ember appearance as flame touches ember material. Do not block air slots by using too much ember material in one area. It is not necessary to use all ember material provided.
3. When lava rock and ember material are in place, close and latch glass door and secure louvers in place.

⚠ WARNING: The glass door must be securely in place before operating fireplace. Do not operate fireplace if glass is missing or broken.

DECORATIVE FACING

Any noncombustible material may be used as facing (glass, tile, brick, etc.) as long as the proper clearances are observed (see Clearances to Combustibles, page 6). Louvered openings must not be obstructed and upper and lower panels must remain accessible for service. Use only heat-resistant, noncombustible mortar or adhesive when securing decorative facing materials.

OPTIONAL FACE EXTENSION (AVAILABLE FE-36M FOR MODEL CD36M-LS)

Front face extension would add 3 1/2" to width and 3/4" to height of fireplace face.

To install face extension:

1. Remove existing screws from front face assembly as shown in Figure 40.
2. Align holes on top face extension with holes on top side of front face assembly and secure with screws previously removed (see Figure 40).

3. Align holes on right face extension with holes on right side of front face assembly and secure with screws previously removed (see Figure 34). Do the same for left side.
4. Secure top face extension with left and right face extensions with two sheet metal screws (see Figure 34).

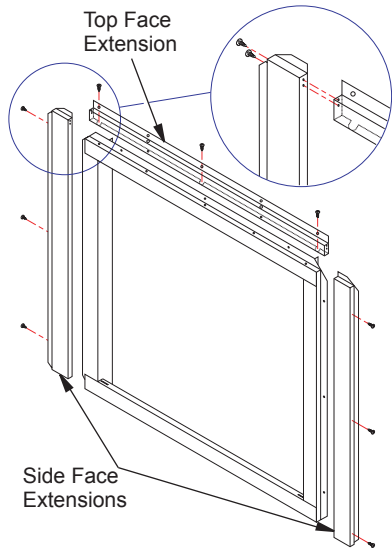


Figure 40 - Front Face Extension, Model CD36M-LS Only

INSTALLATION

Continued

INSTALLING BLOWER ACCESSORY

NOTICE: If installing blower in an existing fireplace with gas connections, shut off gas supply and disconnect fireplace from gas supply. Contact a qualified service person to do this.

⚠ WARNING: If there is a duplex electrical outlet installed in the right side of the bottom of the fireplace base area, be sure that the electrical power to the outlet is turned off before proceeding with blower installation. Failure to do this may result in serious injury.

Model BK Installation

Follow all instructions provided in blower accessory kit.

1. Attach power cord to blower motor by firmly pushing two female terminals at end of power cord onto two spade terminals on blower motor (see Figure 41).
2. Attach green ground wire from power cord to blower housing using screw provided (see Figure 41). Tighten screws securely.
3. Place blower against lower rear wall of firebox outer wrapper with exhaust port directed upward. Blower will fit inside back opening and be held in position against back wall by magnets (see Figure 41).
4. Be certain that all wire terminals are securely attached to terminals on blower motor and that screw retaining green ground wire is tight.
5. Mount speed control box to switch bracket by placing plastic control shaft forward through round opening in switch bracket (see Figure 42).
6. While supporting speed control, secure control shaft with lock nut by pushing and turning lock nut with pliers clockwise until it is tight against front panel. Place provided control knob on shaft.
7. Turn on power to duplex outlet if previously turned off per warning in this column.

8. Plug in blower power cord.

- a. If your firebox is installed as a free-standing unit with an accessory mantel, determine whether power cord will exit left side or right side of firebox. Route power cord through exit hole and plug power cord into a wall receptacle near firebox.
- b. If your firebox installation is recessed and/or pre-wired, plug power cord into duplex outlet provided. Refer to your firebox owner's manual for instructions on wiring duplex outlet.

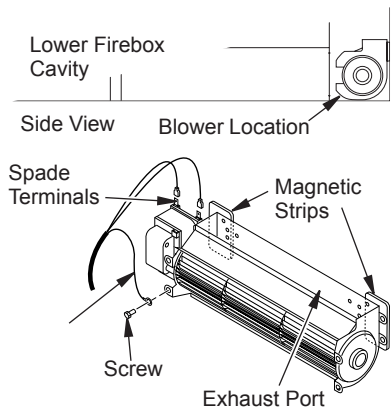


Figure 41 - Blower Model BK

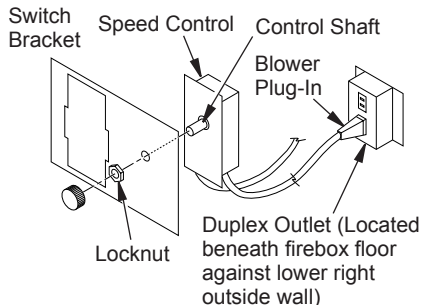


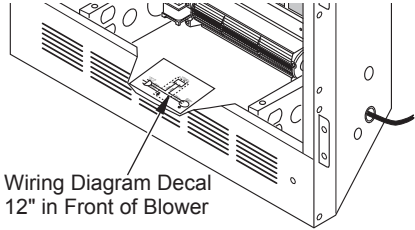
Figure 42 - Attaching Speed Control to Firebox

⚠ CAUTION: Never touch the blower wheel while in operation.

INSTALLATION

Continued

9. Check to make sure that power cord is completely clear of blower wheel and that there are no foreign objects in blower wheel. Turn blower on and check for operation. Turn blower off by turning knob fully counterclockwise before continuing.
10. Peel off backing paper and stick supplied wiring diagram decal on firebox bottom approximately 12" in front of blower (see Figure 43).



Wiring Diagram Decal
12" in Front of Blower

Figure 43 - Location of Wiring Diagram Decal (Model May Vary From Illustration)

BLOWER WIRING DIAGRAM

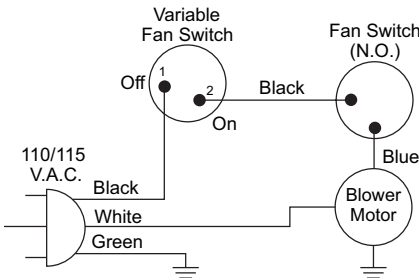


Figure 44 - Blower Wiring Diagram for Thermostat-Controlled Models

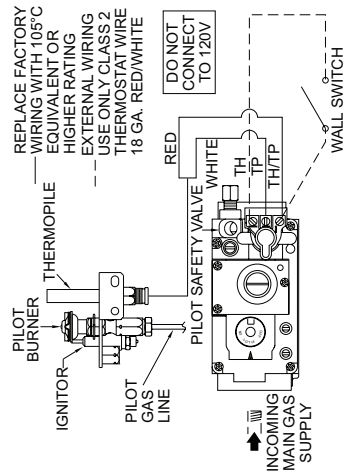


Figure 45 - Millivolt Ignition Wiring Diagram

BURNER FLAME ADJUSTMENT

Burner flame adjustment (shutter opening) has been factory preset (for natural gas) to proper air-to-gas ratio. This ratio results in an even, clean burning flame across burner (see Figure 46, page 24).

If adjustment is necessary, you can restore proper flame setting by loosening air shutter screw and rotating air shutter until proper setting is achieved (see Figure 47, page 24). Correct shutter openings are 3/16" for natural gas and fully open for propane/LP gas.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for assistance. Consult a qualified installer for additional information.

Model	Tube Burner		Pan Burner	
	NG	LP	NG	LP
CD36M-LS	0.188"	Max	—	—
CD42M-LS	0.188"	0.313"	0.188"	0.500"

BURNER FLAME ADJUSTMENT

Continued

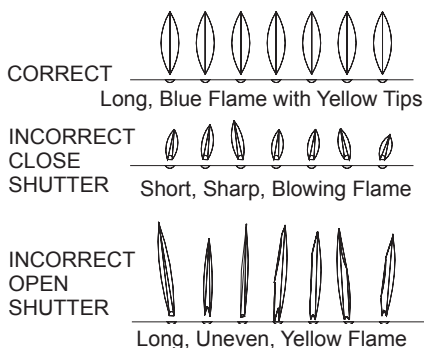


Figure 46 - Burner Flame Patterns

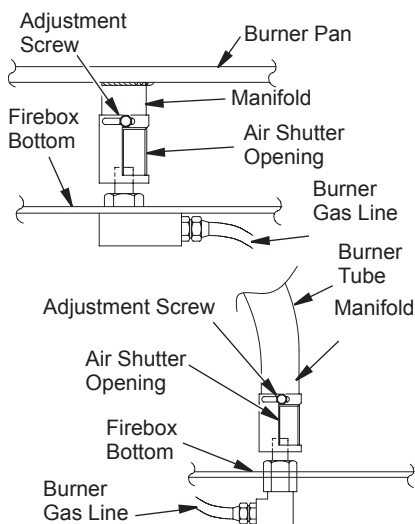


Figure 47 - Air Shutter Adjustments

OPERATION

OPERATION GUIDELINES

- When used for the first time, fireplace may emit a slight odor for about 16 to 24 hours. This is normal and is due to “curing” of logs and “burn-in” of internal paint and lubricant used in manufacturing process.
- Keep compartments, logs, burners and area surrounding logs clean by vacuuming and brushing at least twice a year or as necessary.
- Turn off gas and remote switch before servicing appliance. Any safety screen or guard removed for servicing the fireplace must be replaced prior to operation.
- Have a qualified agency periodically inspect vent system at the start of each heating season for any obstruction which will hinder its normal operation. Never obstruct flow of combustion and ventilation air. Keep front of fireplace clear of all obstacles and materials.

FOR YOUR SAFETY READ BEFORE LIGHTING

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

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

WHAT TO DO IF YOU SMELL GAS




- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in control knob. Never use tools. If the knob will not push in or slide by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

OPERATION

Continued

- 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 safety information in column 1 before proceeding.
2. Turn off all electrical power to appliance.
3. Open bottom access louver.
4. Slide remote selector to OFF position.
5. Make sure manual shutoff valve is fully open.
6. Push in gas control knob slightly and turn clockwise  to OFF.
7. Wait five (5) minutes to clear out any gas. Then smell for gas, including near floor. If you smell gas, STOP! Follow B in safety information in column 1. If you don't smell gas, go to next step.
8. Visually locate pilot assembly by main burner.
9. Turn knob on gas control counterclockwise  to PILOT.
10. Push control knob all the way in and hold. Immediately light pilot by pressing red ignitor button until flame appears. Continue to hold control knob in for about one (1) minute after pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 6 through 10.
 - If knob does not pop out when released, stop and call service technician or gas supplier.
 - If pilot will not stay lit after several tries, turn gas control knob to OFF and call your service technician or gas supplier.
11. Turn gas control knob counterclockwise  to ON. Knob can be turned to ON only if control knob is popped out.
12. Set HI-LO knob to desired setting.
13. Slide remote sector switch to REMOTE position to operate using remote control. Selector switch must be in the ON position to operate manually.

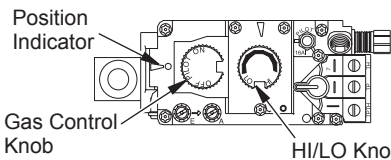


Figure 48 - Control Knob in Pilot Position

14. Turn on all electric power to appliance.

Note: It is recommended that you maintain gas control knob in the full OFF position during lengthy periods of seasonal non use.

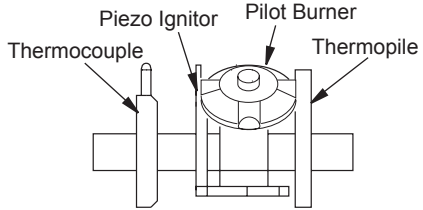



Figure 49 - Pilot

TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch, if installed.
2. Turn off all electric power to appliance if service is to be performed.
3. Open bottom access louver.
4. Slide selector switch to OFF position.
5. Push in gas control knob slightly and turn clockwise  to OFF. Do not force.
6. Close bottom access louver.

OPTIONAL HAND-HELD REMOTE OPERATION

Note: All remote control accessories must be purchased separately (see [Accessories](#), page 38). Follow instructions included with remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See [Lighting Instructions](#).

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide selector switch to the REMOTE position.

Note: The burner may light if hand-held remote was on when selector switch was last turned off. You can now turn burner on and off with hand-held remote control unit.

IMPORTANT: Do not leave the selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.

GAS CONVERSION

The conversion kit is packaged with the unit. Please check the contents before beginning this conversion.

⚠ WARNING: Before proceeding, make sure the gas control valve is in the OFF position and all electrical power to the appliance is turned off.

CONVERTING PILOT

1. Wait five (5) minutes to clear out any gas. Smell for any gas odor, especially near the floor. If any gas odor is present, STOP! See *For Your Safety Read Before Lighting* on page 24.
2. Locate latch on louver assembly. Remove top and bottom louvers by pulling spring latches toward center of fireplace simultaneously until they are disengaged from locating holes.
3. Undo latches located on top and bottom of firebox and swing door to fully open position.
4. Carefully remove log set and ember material from burner and place them aside in a safe place.
5. Replace main burner orifice with burner orifice included in conversion kit. (Model CD42M-LS series contains two burner orifices).
6. Locate air shutter at end of burner manifold. (End of tube burner for CD42M-LS series). Loosen screw and adjust air shutter to proper setting (see *Burner Flame Adjustment*, page 23). Retighten screw.
7. Remove pilot hood by pulling up until it disengages from barrel. Do not remove the retainer clip (see Figure 50).
8. Remove pilot orifice from inside barrel using a 5/32" allen wrench to unscrew orifice.
9. Replace pilot orifice with LP orifice supplied with this kit. The number 30 is stamped on the sleeve for identification. Insert small end of new pilot orifice into barrel and thread until tight with the allen wrench.
10. Line up notch on pilot hood to the positioning tab on pilot receiver and snap back into position.

IMPORTANT: Be careful not to bend or kink aluminum tubing during conversion. Make sure pilot hood and orifice are properly mated and aligned after finishing this conversion.

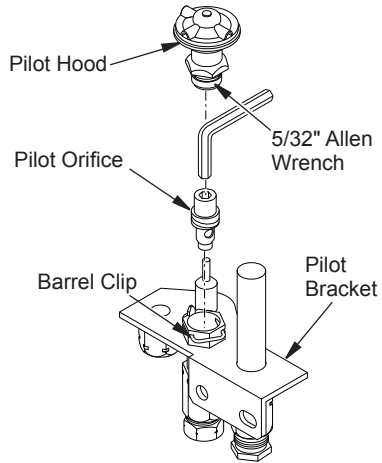


Figure 50 - Converting Pilot

CONVERTING CONTROL VALVE

Convert gas control valve by swapping out valve regulator portion of gas valve.

1. Using a TORX T20 or a slotted screwdriver, remove and discard three mounting screws, pressure regulator tower and diaphragm/spring components (see Figure 51).

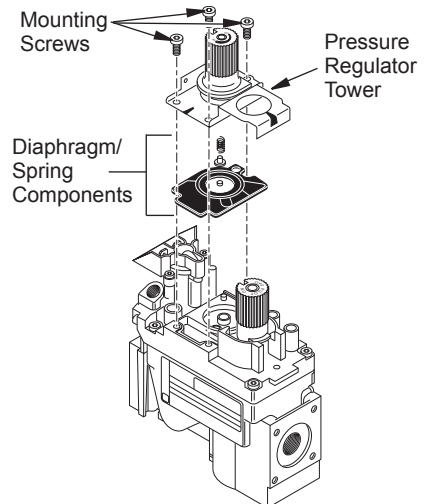


Figure 51 - Removing Parts for Gas Control Valve Conversion

GAS CONVERSION

Continued

2. Insure that rubber gasket is properly positioned on new pressure regulator assembly. Install new pressure regulator assembly to valve using new mounting screws supplied with kit. Tighten screws securely (approximately 25 in/lb). See Figure 52.
3. Install identification label enclosed with gas valve regulator to valve body where it can easily be seen (see Figure 52).

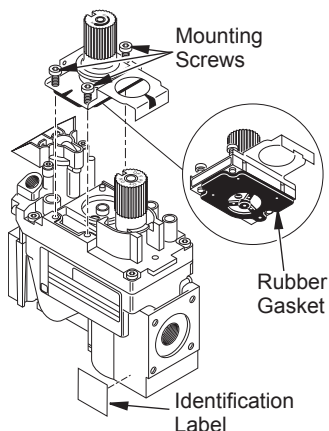


Figure 52 - Installing New Parts for Gas Control Valve Conversion

⚠ WARNING: The conversion kit must be installed by a qualified service technician in accordance with the manufacturers instructions and all applicable codes and requirements of the authority having jurisdiction. If any information in these instructions is not followed correctly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service technician is responsible for the proper installation of this conversion kit.

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off fireplace and let cool before cleaning.

⚠ CAUTION: You must keep control areas, burners and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

GLASS DOOR

⚠ WARNING: Handle glass door panel with care. Do not strike, slam or otherwise abuse glass. Do not operate fireplace with the glass door unlatched, removed, cracked or broken.

⚠ WARNING: Do not use abrasive cleaners as this may damage glass. Use a nonabrasive household glass cleaner to clean glass. Do not clean glass when hot.

Glass must be cleaned periodically. During start-up it is normal for condensation to form on the inside of the glass causing lint, dust and other airborne particles to cling to the glass surface. During initial start-up a slight film may form on the glass due to paint curing. The glass should be cleaned several times with a non-ammonia, nonabrasive household cleaner and warm water after the first two weeks of operation. Thereafter, clean the glass two or three times during each heating season, depending on the usage and circumstances present. Refer to *Removing Glass Panel*, page 18 of this manual when removing glass door for cleaning.

CLEANING AND MAINTENANCE

Continued

⚠ WARNING: Only parts supplied by the manufacturer should be used when replacing broken or damaged glass door panel (see Replacement Parts, page 33). This glass door panel is a complete unit. No substitute materials may be used.

⚠ CAUTION: Wear gloves and safety glasses while handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass.

If glass has been broken, carefully remove glass door (see Removing Glass Panel, page 18). Vacuum all glass pieces with a shop vac.

⚠ CAUTION: Do not vacuum if pieces are hot.

Use only the tempered glass door replacement intended for this fireplace (see Replacement Parts, page 33 for detail on ordering). No substitutions may be made. See Removing Glass Panel, page 18 for instructions for replacing glass door.

⚠ WARNING: Do not operate fireplace with the glass door unlatched, removed, cracked or broken.

LOGS

- If you remove logs for cleaning, refer to Installing Logs Lava Rock and Glowing Embers, page 19, to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See Replacement Parts on page 33.
- Replace ember material periodically as needed. See Replacement Parts on page 33.

VENTING SYSTEM

Conduct annual inspection of the venting system following these guidelines:

1. Check areas of venting system that are exposed to the weather for corrosion (rust spots or streaks and, in extreme cases, holes). Have these items replaced immediately by a qualified service person.
2. Remove the vent cap and shine a flashlight into the vent. Remove any foreign material.
3. Check for evidence of excessive condensation. Continuous condensation can cause corrosion of caps, pipes and fittings and can be caused by having excessive lateral runs, too many elbows or exterior portions of the system being exposed to cold weather.
4. Inspect joints to verify that no pipe section or fitting has been disturbed and loosened. Check mechanical supports such as wall straps for rigidity.

PILOT AND BURNERS

- Remove ember material before cleaning burners and replace when cleaning is complete.
- Burner and controls should be cleaned with compressed air to remove dust, dirt or lint.
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt or lint.

TROUBLESHOOTING

⚠ WARNING: Turn off fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.

⚠ WARNING: Turn off fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot will not stay lit	1. Defective thermocouple	<ol style="list-style-type: none"> 1. Check pilot flame. It must impinge on thermocouple 2. Clean or adjust pilot for maximum flame impingement on thermocouple 3. Ensure connection between valve and thermocouple are tight and secure 4. Check thermocouple with millivolt meter. Take reading at thermocouple terminals of gas valve with remote control off. It should read 18 millivolts minimum. Replace faulty thermocouple if reading is below specified minimum
Pilot lit but no flame on burner	<ol style="list-style-type: none"> 1. Remote or wires defective 2. Thermopile not generating sufficient millivoltage 3. Plugged burner orifice 	<ol style="list-style-type: none"> 1. Check remote wires for proper connections. Place jumper wire across terminals at remote control. If burner comes on, replace remote. If okay, place jumper wire across remote control at valve. If burner comes on, wires are faulty or connections are bad 2. Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve with remote control off. It should read 325 millivolts minimum. Replace thermopile if reading is below specified minimum 3. Check burner orifice for stoppage and remove
Frequent pilot outage	1. Pilot flame may be too low or blowing (high) causing safety pilot to “drop out”	1. Clean and/or adjust pilot flame for maximum flame impingement on thermocouple

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Delayed ignition burner	<ol style="list-style-type: none">1. Manifold pressure is too low2. Burner porting or orifice clogged	<ol style="list-style-type: none">1. Contact local propane/LP or natural gas company2. Clean burner (see <i>Cleaning and Maintenance</i>, page 27) or replace burner orifice
Burner backfiring during combustion	<ol style="list-style-type: none">1. Burner orifice is clogged or damaged	<ol style="list-style-type: none">1. Clean burner (see <i>Cleaning and Maintenance</i>, page 27) or replace burner orifice
Slight smoke or odor during initial operation	<ol style="list-style-type: none">2. Damaged burner3. Gas regulator defective	<ol style="list-style-type: none">2. Replace damaged burner3. Replace gas control
	<ol style="list-style-type: none">1. Residues from manufacturing processes and logs curing	<ol style="list-style-type: none">1. Problem will stop after a few hours of operation

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces a whistling noise when burner is lit	<ol style="list-style-type: none"> 1. Turning gas control knob to HI position when burner is cold 2. Air in gas line 3. Dirty or partially clogged burner orifice 	<ol style="list-style-type: none"> 1. Turn gas control knob to LO position and let warm up for a minute 2. Operate burner until air is removed from line. Have gas line checked by local propane/LP or natural gas company 3. Clean burner (see <u>Cleaning and Maintenance</u>, page 27) or replace burner orifice
Glass soots	<ol style="list-style-type: none"> 1. Debris around burner air mixer 2. Improper vent configuration 	<ol style="list-style-type: none"> 1. Inspect the opening at the base of the burner by removing log/grate assembly to see that it is NOT packed with any type of material for log/grate removal 2. Check vent configuration specifications (see <u>Venting Installation</u>, page 10)
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	<ol style="list-style-type: none"> 1. Metal expanding while heating or contracting while cooling 	<ol style="list-style-type: none"> 1. This is normal. If noise is excessive, contact qualified service person
Remote does not function	<ol style="list-style-type: none"> 1. Battery is not installed or battery power is low 	<ol style="list-style-type: none"> 1. Replace 9-volt batteries in receiver and hand-held remote control
Dark residue on logs or inside of fireplace	<ol style="list-style-type: none"> 1. Air holes at burner inlet blocked 2. Burner flame holes blocked 3. Improper venting or excessive blockage 4. Excessive amounts of embers and pan material 	<ol style="list-style-type: none"> 1. Clean out air holes at burner inlets. Periodically repeat as needed 2. Remove blockage or replace burner 3. Have vent system inspected, including termination cap. Remove any restrictions or obstruction 4. Clear excess embers until a minimum gap of 1/2" remains under the grate

TROUBLESHOOTING

Continued



WARNING: If you smell gas

- Shut off gas supply.
- 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	1. Gas leak. See Warning statement above	1. Locate and correct all leaks (see Checking Gas Connections , page 17)
Fireplace shuts off in use	1. High or gusting winds 2. Low line pressure 3. Pilot is partially clogged 4. Inner vent pipe leaking exhaust gasses into system 5. Glass too loose and air tight gasket leaks in corners after usage 6. Bad thermopile or thermocouple 7. Improper vent cap installation	1. Fireplace has been tested for up to 40 mph winds. However, extreme conditions may occur. See Lighting Instructions on page 25 2. Contact local propane/LP or natural gas company 3. Clean pilot (see Cleaning and Maintenance , page 27) 4. Locate and correct all leaks (see Checking Gas Connections , page 17) 5. Tighten glass 6. Replace faulty component 7. Check for proper installation and freedom from debris or blockage
Gas odor even when control knob is in OFF position	1. Gas leak. See Warning statement above 2. Control valve defective	1. Locate and correct all leaks (see Checking Gas Connections , page 17) 2. Replace control valve
Gas odor during combustion	1. Gas leak. See Warning statement above	1. Locate and correct all leaks (see Checking Gas Connections , page 17)

SPECIFICATIONS

CD36M-LS Natural Gas

- Rating: 15,000/22,000 Btu/Hr
- Gas Type: Natural Gas Only
- Ignition: Piezo
- Manifold Pressure: 3.5" W.C.
- Orifice Size (Main Burner): #43 DMS
- Minimum Inlet Supply Pressure: 4.5" W.C.
- Firebox Dimensions (HxWxD) (Flanges and Standoffs Not Included in Measurements): 36 1/8" x 41 1/4" x 23 1/2"

CD36M-LS Propane/LP Gas

- Rating: 14,000/20,000 Btu/Hr
- Gas Type: Propane/LP Gas Only
- Ignition: Piezo
- Manifold Pressure: 10" W.C..
- Orifice Size (Main Burner): #55 DMS
- Minimum Inlet Supply Pressure: 11" W.C.
- Firebox Dimensions (HxWxD) (Flanges and Standoffs Not Included in Measurements): 36 1/8" x 41 1/4" x 23 1/2"

CD42M-LS Natural Gas

- Rating: 25,000/35,000 Btu/Hr
- Gas Type: Natural Gas Only
- Ignition: Piezo
- Manifold Pressure: 3.5" W.C.
- Orifice Size (Main Burner): #47 DMS
- Minimum Inlet Supply Pressure: 4.5" W.C.
- Firebox Dimensions (HxWxD) (Flanges and Standoffs Not Included in Measurements): 40" x 48" x 23 1/2"

CD42M-LS Propane/LP Gas

- Rating: 23,000/33,000 Btu/Hr
- Gas Type: Propane/LP Gas Only
- Ignition: Piezo
- Manifold Pressure: 10" W.C..
- Orifice Size (Main Burner): #55 DMS
- Minimum Inlet Supply Pressure: 11" W.C.
- Firebox Dimensions (HxWxD) (Flanges and Standoffs Not Included in Measurements): 40" x 48" x 23 1/2"

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

Contact authorized dealers of this product. If they can't supply original replacement part(s), call FMI PRODUCTS, LLC at 1-866-328-4537 for referral information. A list of authorized dealers can be found by visiting www.fmiproducts.com.

When calling have ready:

- model and serial numbers of your fireplace
- the replacement part number

SERVICE HINTS

When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply might be low (propane/LP units only)

You may feel your gas pressure is too low. If so, contact your local gas supplier.

TECHNICAL SERVICE

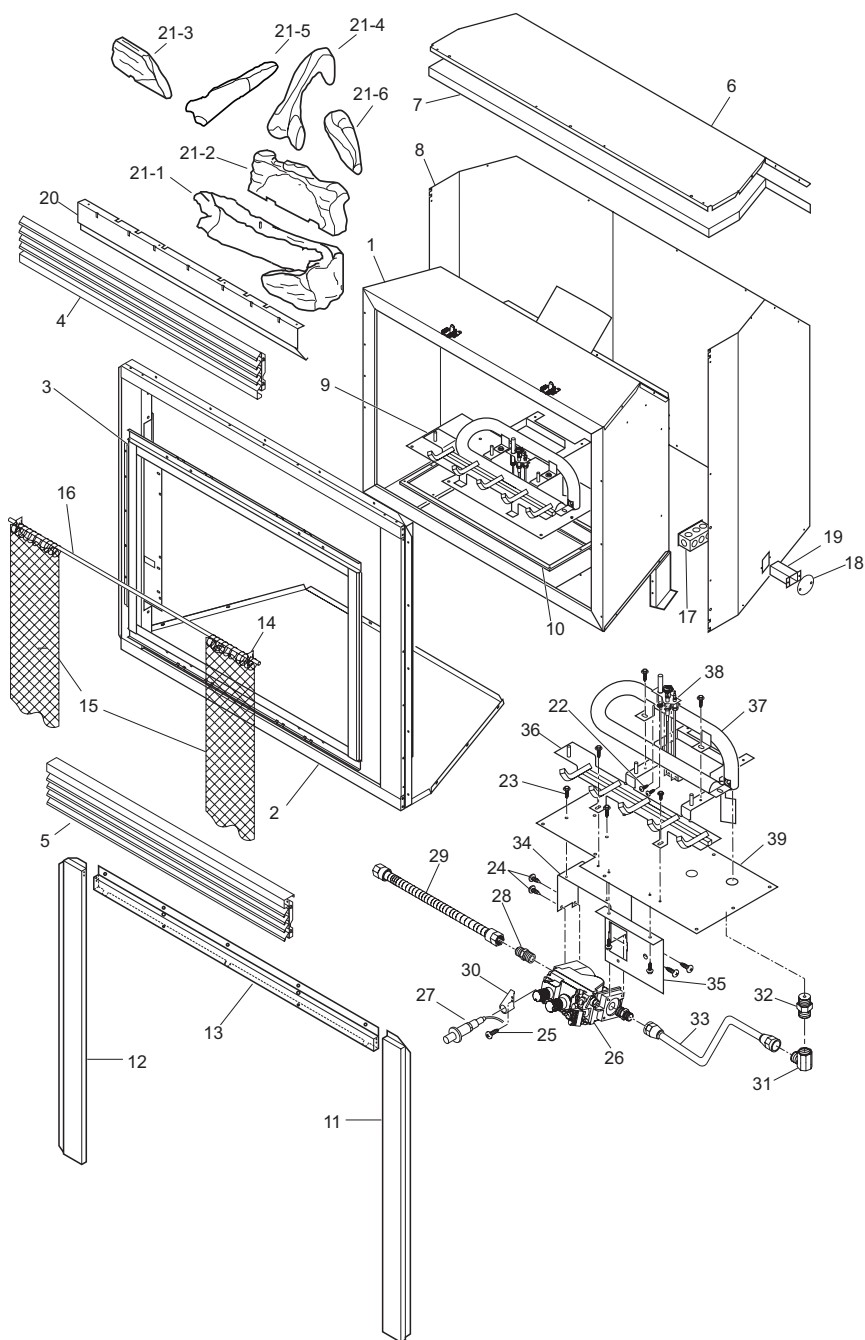
You may have further questions about installation, operation, or troubleshooting. If so, contact FMI PRODUCTS, LLC at 1-866-328-4537.

When calling please have your model and serial numbers of your fireplace ready.

You can also visit FMI PRODUCTS, LLC's web site at www.fmiproducts.com.

PARTS

MODEL CD36M-LS



PARTS

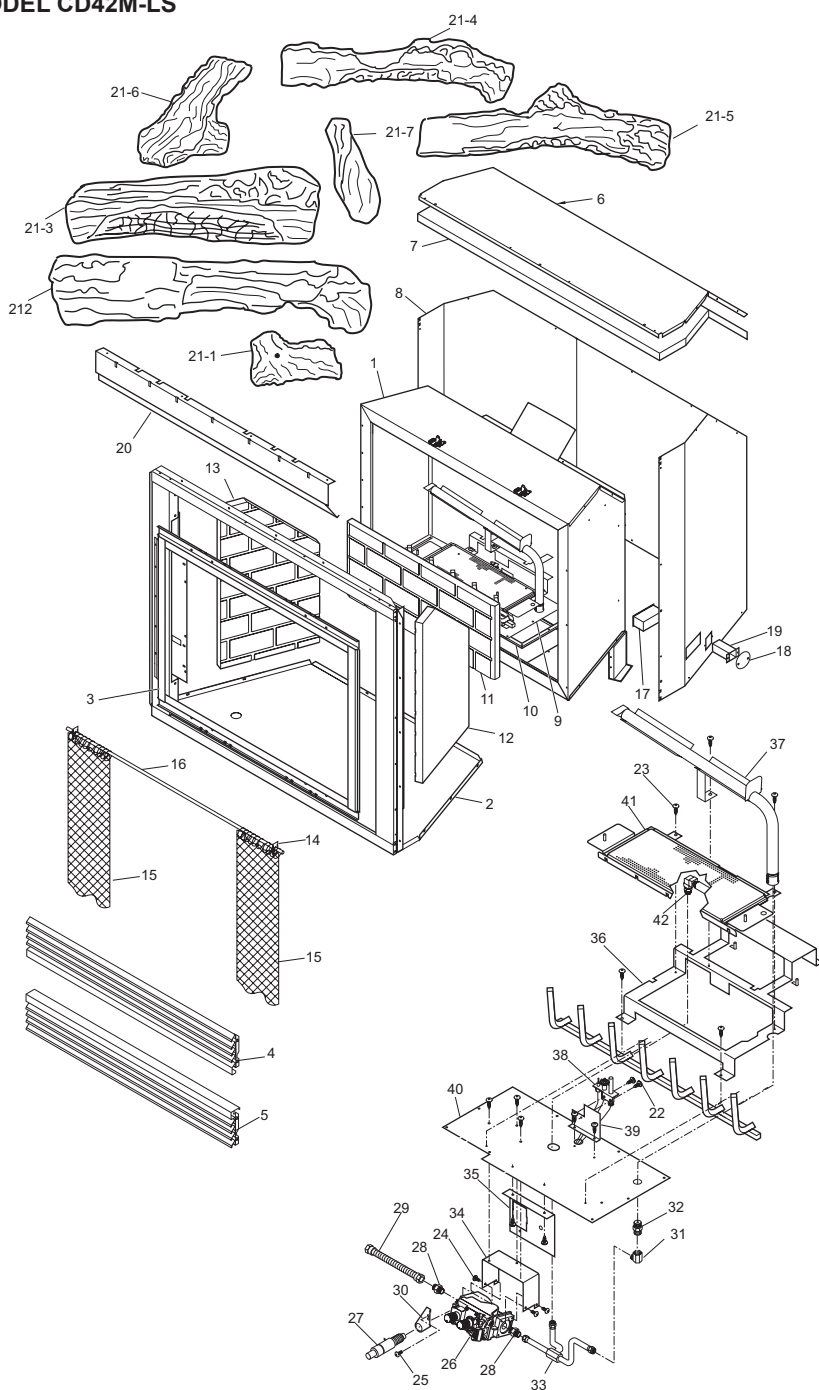
MODEL CD36M-LS

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	**	Firebox Assembly	1
2	**	Face Weldment	1
3	110994-01	Door Assembly	1
4	108011-01	Top Panel Assembly Louver	1
5	108011-02	Bottom Panel Assembly Louver	1
6	**	Fireplace Top	1
7	****	Fireplace Top Insulation	1
8	**	Fireplace Surround	1
9	111878-01	Burner Assembly	1
10	110985-01	Burner Base Gasket	1
11	—	Right Face Extension	1
12	—	Left Face Extension	1
13	—	Top Face Extension	1
14	11418	Push-On Nut	2
15	12105	Screen	2
16	13113	Screen Rod	1
17	**	Electrical Duct Assembly	1
18	**	Gas Knock-Out Cover	2
19	**	Gas Conduit Assembly	1
20	109082-01	Heat Shield	1
21	109006-01	Log Set	1
21-1	110182-01	Front Log (Log 2)	1
21-2	109007-01	Rear Log (Log 1)	1
21-3	109009-01	Base Log (Log 5)	1
21-4	109008-01	Crossover Log (Log 3)	1
21-5	107348-01	Left Top Log (Log 6)	1
21-6	107347-01	Right Top Log (Log 4)	1
22	11102	Screw #8-32 x 3/8 PPH Zinc	2
23	11105	Screw #10 x 1/2 Zinc	9
24	11179	Screw #10-24 x 1/4 Zinc	4
25	11237	Screw Trilab M4 x 8 mm	1
26	14389	HI-LO Sit Valve (Natural Gas)	1
27	097159-04	Piezo Ignitor	1
28	14500	Brass Fitting	2
29	111288-02	Flexible Connector	1
30	14511	Ignitor Bracket	1
31	14528	Brass Elbow Fitting	1
32	104506-01	Orifice #43	1
33	110984-01	Aluminum Tubing Assembly	1
34	26808	Valve Bracket	1
35	26827	Switch Bracket	1
36	111911-01	Grate Base	1
37	110987-01	Burner Tube	1
38	108084-02	Pilot Assembly (Natural Gas)	1
39	**	Burner Base Assembly	1
PARTS AVAILABLE NOT SHOWN			
	101142-01SA	Lava Rock	1
	110251-01	Micro Switch Assembly	1
	112033-01	Gas Conversion Kit	1

** Not a field replaceable part.

PARTS

MODEL CD42M-LS



PARTS

MODEL CD42M-LS

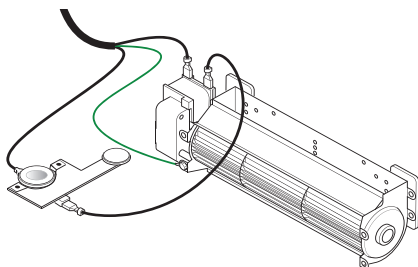
KEY NO.	PART NO.	DESCRIPTION	QTY.
1	**	Firebox Assembly	1
2	**	Face Weldment	1
3	108328-01	Door Assembly	1
4	108331-01	Top Panel Assembly Louver	1
5	108331-03	Bottom Panel Assembly Louver	1
6	**	Fireplace Top	1
7	**	Fireplace Top Insulation	1
8	**	Fireplace Surround	1
9	108329-05	Burner Assembly	1
10	108374-01	Burner Base Gasket	1
11	111297-01	Rear Refractory	1
12	111298-01	Right Refractory	1
13	111299-01	Left Refractory	1
14	11418	Push-On Nut	2
15	107840-01	Screen	2
16	108455-01	Screen Rod	1
17	110037-01	Electrical Duct Assembly	1
18	**	Gas Knock-Out Cover	2
19	**	Gas Conduit Assembly	1
20	**	Heat Shield	1
21	108778-01	Log Set	1
21-1	109402-01	Small Base Log (Log 1)	1
21-2	109396-01	Front Log (Log 2)	1
21-3	109397-01	Rear Log (Log 3)	1
21-4	109398-01	Crossover Log (Log 4)	1
21-5	109399-01	Top Center Log (Log 5)	1
21-6	109400-01	Top Left Log (Log 6)	1
21-7	109401-01	Top Right Log (Log 7)	1
22	11102	Screw #8-32 x 3/8 PPH Zinc	2
23	11105	Screw #10 x 1/2 Zinc	9
24	11179	Screw #10-24 x 1/4 Zinc	4
25	11237	Screw Trilab M4 x 8 mm	1
26	14389	HI-LO Sit Valve (Natural Gas)	1
27	14492	Piezo Ignitor	1
28	14500	Brass Fitting	2
29	14253	Flexible Connector	1
30	14511	Ignitor Bracket	1
31	14528	Brass Elbow Fitting	1
32	104506-25	Orifice	1
33	14544	Aluminum Tubing Assembly	1
34	26808	Valve Bracket	1
35	26827	Switch Bracket	1
36	108346-01	Grate Base	1
37	108376-01	Burner Tube	1
38	108084-02	Pilot Assembly (Natural Gas)	1
39	108755-01	Pilot Bracket	1
40	108373-01	Burner Base Assembly	1
41	108330-01	Burner Pan Assembly	1
42	104506-24	Orifice	1
PARTS AVAILABLE NOT SHOWN			
	25487	Lava Rock	1
	110251-01	Micro Switch Assembly	1
	27253	Notice Label	1
	111007-01	Gas Conversion Kit	1

** Not a field replaceable part.

ACCESSORIES

NOTE: All accessories may not be available for all fireplace models.

Purchase these accessories from an authorized dealer. If they can not supply these accessories call FMI PRODUCTS, LLC at 1-866-328-4537. A list of authorized dealers can be found.



THERMOSTATICALLY - CONTROLLED BLOWER KIT - BKT

Provides better heat distribution Blower turns off and on automatically, as needed. Complete installation and operating instructions included in this manual.



REMOTE CONTROL KIT MRC

Allows the fireplace to be turned on and off conveniently.

WALL MOUNTED ON/OFF SWITCH GWMS2

Allows burner system to be turned on and off with a wall switch.

BRICK LINER KITS

BL36D - 36" Warm Red Traditional Stacked Brick

BL36DH - 36" Warm Red Herringbone Brick

FACE EXTENSION - FE-36M

124190-01 Right Face Extension

124191-01 Left Face Extension

124192-01 Top Face Extension

NOTES

WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag) _____

Serial No. (located on product or identification tag) _____

Date Purchased _____

Keep receipt for warranty verification.

FMI PRODUCTS, LLC LIMITED WARRANTIES

New Products

Standard Warranty: FMI PRODUCTS, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of two (2) years from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: FMI PRODUCTS, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a FMI PRODUCTS, LLC Authorized Service Center or a provider approved by FMI PRODUCTS, LLC. Warranty parts must be obtained through authorized dealers of this product and/or FMI PRODUCTS, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner. All warranty will be voided if this product is used with a thermostat.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is FMI PRODUCTS, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits the duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to two (2) years on new products and 30 days on factory reconditioned products from the date of first purchase. FMI PRODUCTS, LLC makes no other warranties regarding this product.

FMI PRODUCTS, LLC's liability is limited to the purchase price of the product, and FMI PRODUCTS, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For information about this warranty contact:


FMI PRODUCTS, LLC
2701 S. Harbor Blvd.
Santa Ana, CA 92704
1-866-328-4537
www.fmiproductions.com

125205-01
Rev. E
04/13