

INSTALLING & OPERATING YOUR MARCO GAS FIREPLACE



MARCO CUSTOM 36 FIREPLACES

STOCK #	MODEL REFERENCE	DESCRIPTION
794015-C	MGC36SPNGCF	36" Standing Pilot, Natural Gas, Clean Face Fireplace
794017-C	MGC36SPLPCF	36" Standing Pilot, Liquid Propane, Clean Face Fireplace
794019-C	MGC36SPNGHC	36" Standing Pilot, Natural Gas, Heat Circulating Fireplace
794021-C	MGC36SPLPHC	36" Standing Pilot, Liquid Propane, Heat Circulating Fireplace

CHECK LOCAL CODES PRIOR TO INSTALLATION

OPTIONAL FEATURES:

CABINET, FIXED OR BIFOLD GLASS DOORS
GLASS DOOR TRIM KITS
OUTSIDE AIR KIT
REMOTE CONTROL
FAN KIT

FOR YOUR SAFETY WHAT TO DO IF YOU SMELL GAS:

- 1) Do not try to light any appliance.
- 2) Do not touch any electrical switch; do not use any phone in your building.
- 3) Extinguish any open flame.
- 4) Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- 5) If you cannot reach your gas supplier, call the fire department.

FOR YOUR SAFETY:

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

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 materials on or near the appliance.



This symbol on the product
means it is listed by
Warnock Hersey

MARCO CUSTOM 36

INSTALLATION INSTRUCTIONS

TABLE OF CONTENTS

Introduction	Page 1
Accessories	Page 2
General Information	Page 2
Selecting Your Fireplace Location	Page 3
Clearances	Page 4
Framing Instructions	Page 4
Gas Line Hookup	Page 4
Installation of Air Inlet Assembly	Page 5
Venting	Page 7
Optional Cold Climate Installation	Page 7
Log Placement	Page 8
Finishing the Fireplace	Page 9
Mantels	Page 9
Operation Instructions	Page 10
Operation Guidelines and Maintenance Instructions	Page 10
Wiring Diagram	Page 12
Lighting and Shutdown Instructions and Cautions	Page 13
Troubleshooting	Page 15
Do's and Don'ts	Page 16
Replacement Parts	Page 17

SAVE THIS BOOK

THIS MANUAL PROVIDES ALL THE INSTRUCTIONS NECESSARY FOR THE BUILDER OR HOMEOWNER TO INSTALL THE MARCO CUSTOM 36 GAS FIREPLACES SAFELY AND EFFICIENTLY. IT ALSO PROVIDES INFORMATION ON HOW TO ORDER REPLACEMENT PARTS WHEN NEEDED.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE AND HOMEOWNER'S USE.

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

INTRODUCTION

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

INSTALLATION AND GAS LINE HOOKUP SHOULD BE PERFORMED BY A QUALIFIED INSTALLER.

This MARCO Custom 36 gas fireplace and its components are safe when installed according to this Installation Manual. Unless you use Marco components which have been designed and tested for this gas system, you may cause a fire hazard.

The MARCO Custom 36 Standing Pilot utilizes a millivolt gas control valve and a piezo ignition system. **The fireplace does not need external power to operate.** However, the optional blower fan kit can be installed during or after the fireplace installation. Therefore:

THE RECEPTACLE INSIDE THE FIREPLACE MUST BE WIRED TO A HOUSE ELECTRICAL CIRCUIT. The power requirement is: 120V., 60 Hz. (Less Than 1 AMP). (Refer to wiring diagram on page 11 for details).

The Marco Custom 36 Standing Pilot is supplied with an ON/OFF switch. This must be wired externally to a wall (See wiring diagram on Page 11). Before installing, make sure installation is in compliance with all the local and applicable electrical building codes.

WARNING: THIS IS NOT A WOOD BURNING FIREPLACE. ANY ATTEMPT TO BURN WOOD IN THIS FIREPLACE IS EXTREMELY HAZARDOUS AND WILL VOID THE MARCO WARRANTY.

ACCESSORIES

GLASS DOOR KITS

Bifold, Cabinet or Fixed Glass Doors may be installed as an optional accessory. The glass doors can be installed before, during or after the installation of the fireplace.

The Marco Custom 36 fireplace may be installed in either a conventional or prefabricated home. Glass Doors and Outside Air Kits may be purchased as optional accessories.

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

- Modification of the gas appliance and/or components as they have been designed and assembled. This includes the assembly of the chimney or venting system and any accessories such as glass doors, the air inlet system, the damper control and optional remote control.
- Use of any component part not manufactured or approved by Marco for use in the MARCO Custom 36 system.
- Installation and/or operation in a manner other than as instructed in this manual.
- The burning of wood and/or other unapproved material.
- Removal of the gas appliance's log set and/or burner unless they have been removed or replaced for normal maintenance.
- The use of any accessory products not approved for use in the MARCO Custom 36 system.

PROPER INSTALLATION is the most important step in ensuring safe, long-term operation of this gas appliance. Consult the local building codes prior to installation to ensure conformance with the codes relating to the installation of this appliance.

NOTE: USE OF GLASS DOORS OTHER THAN THOSE MANUFACTURED BY MARCO MFG., INC. COULD CREATE A POTENTIALLY HAZARDOUS CONDITION AND WILL VOID THE MARCO WARRANTY.

OUTSIDE AIR KIT

An optional outside air kit is available for installation. An outside air kit helps ensure proper air flow to the appliance. This kit, if desired, must be installed during installation of fireplace.

REMOTE CONTROL

The Marco Custom 36 Standing Pilot fireplace is operated by the use of a remote wall switch provided by Marco. However, if desired, this fireplace may also be operated with the use of an optionally purchased hand held remote control. (Marco Part #794012). The handheld remote control may be purchased before or after the time of installation from an authorized Marco distributor.

BLOWER FAN KIT

The Marco Custom 36 Heat Circulating Models will accept the optional variable speed blower fan kit (Marco Part #794563) that has been designed specifically to provide greater air flow throughout the internal convection chamber of the fireplace, thus enabling more air to be drawn into and then out of the warm air discharge area directly above the combustion chamber. This option requires the fireplace to be supplied with 115 Volts 60 Hz. See wiring diagram on page 11.

GENERAL INFORMATION

This appliance is tested and listed by Warnock Hersey to ANSI Z21.50b 1990 as a vented, decorative gas appliance. The input rating is 22,500 BTU/Hr. The burner orifice is # 43 for Natural Gas and # 54 for Liquid Propane.

HIGH ALTITUDE INSTALLATION

The calorific value of gas may be different from one region to another due to difference in altitude, you must check with your local gas supplier to determine the corresponding orifice size, then call Marco Mfg., for a replacement orifice.

Installation must conform to local codes. In the absence of local codes, installation must conform with the current National Fuel Gas Code, ANSI Z223.1-Latest.

This appliance must be electrically grounded in accordance with the National Electrical Code, ANSI/NFPA No.70-Latest, when Fan Kit is installed.

NOTE: Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent inspections/cleanings may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burner and circulating air passage ways of the appliance be kept clean.

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

Minimum clearances to combustibles are: Top 0" to the Top pacers, see Figure 3A; Sides 1/2"; Back 1/2"; Floor 0"; Ceiling 48"; Vent Surfaces, Type B as listed.

PLEASE READ THIS ENTIRE MANUAL PRIOR TO INSTALLATION AND OPERATION

Minimum inlet gas pressure is 5.0 inches water column of natural gas, and 11.0 inches for propane, for the purpose of input adjustment.

Maximum inlet gas supply pressure is 10.0 inches water column for natural gas and 13.0 inches for propane.

A 1/8" N.P.T. plugged tapping is provided on the gas control along the side of the outlet to the main burner for a test gauge connection.

The appliance must not be connected to a chimney flue already servicing a solid fuel burning appliance.

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

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

A gas supply shutoff valve must be installed in the supply line to the appliance so that the appliance may be disconnected for servicing. This shutoff valve is not supplied with the appliance.

When the appliance is installed directly on carpeting, tile or any other combustible material other than wood flooring, the appliance must be installed on a metal or wood panel that extends the full width and depth of the appliance.

SELECTING YOUR FIREPLACE LOCATION

To determine the safest and most efficient location for your fireplace, consider such factors as room traffic, location of doors and windows, and construction above and below the installation area. The fireplace may be installed in any location where air conditioning ducts, electrical wiring, and plumbing will not obstruct or inhibit the installation. This location must also allow the appliance to be installed with the necessary clearances.

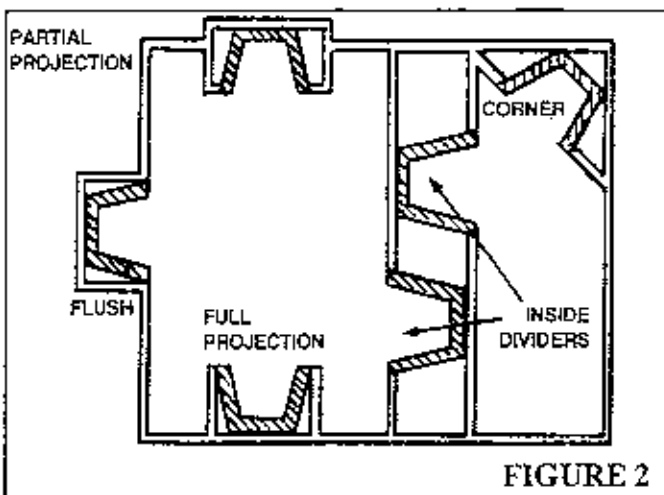


FIGURE 2

LOCATION

Corners should be considered where space is limited or at a premium. A corner-installed fireplace can make use of space that may not normally be used (see Figure 5).

A fireplace may be installed flush with the finished wall or projecting any distance into the room. Flush installation is recommended for smooth or thin wall-facing materials. By installing the fireplace to project into the room, a shallower cavity is required to contain the fireplace; thicker natural materials, such as field stone, can then be used for face material.

A location that requires cutting the least number of joists, roof rafters, and floor joists will reduce costs and make installation easier. This may mean moving only one or two inches from the selected ideal location. Any location selected must allow adequate room to accommodate the fireplace and framing dimensions shown in Figures 4, 5 and 6.

Do not place the fireplace on soft-surfaced floor coverings such as carpeting. The mounting surface must be flat and hard (such as plywood, wood flooring, particle board or any other hard-surfaced material), and evenly support the total base of the fireplace. A raised platform may be used to support the fireplace.

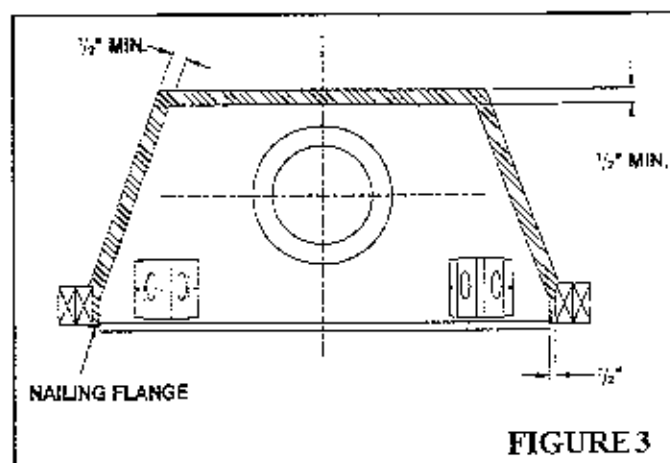


FIGURE 3

CLEARANCES

When installed in accordance with the instructions given in this manual, the fireplace system may touch combustible materials at the bottom. A 1/2" clearance is required on the sides and the back of the fireplace, except at the nailing flange where clearance is 0" (See Figure 3). The B-Vent system requires a minimum 1" air space and 3" clearance to combustibles at the pipe connector (See Figure 3A).

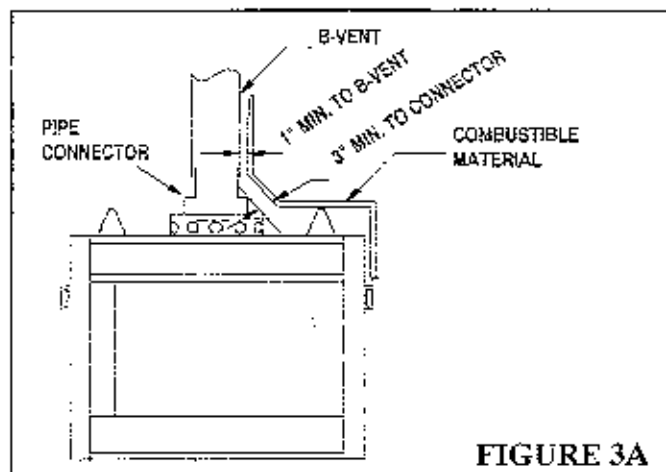


FIGURE 3A

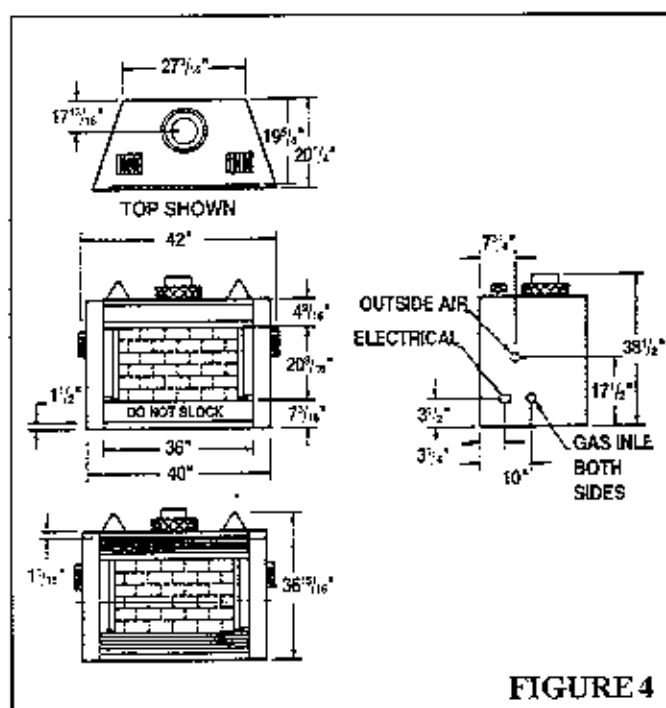


FIGURE 4

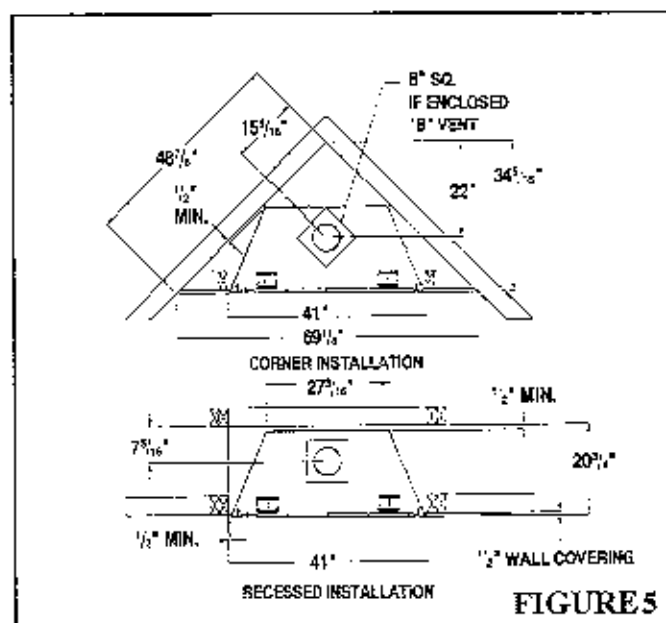


FIGURE 5

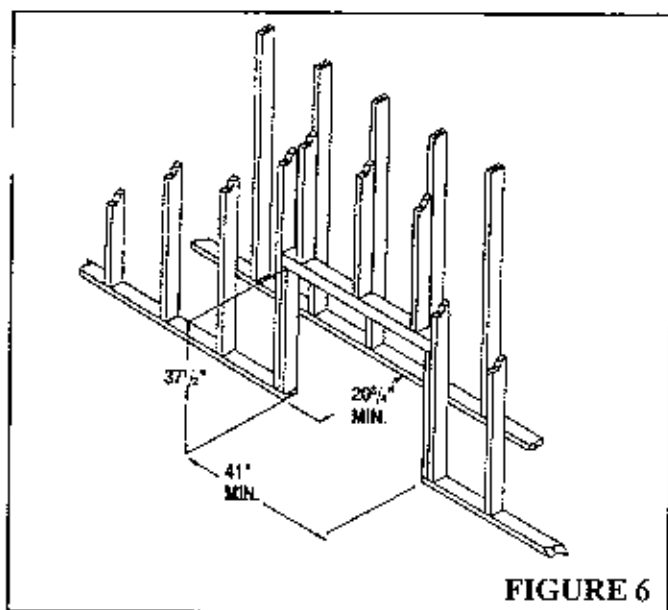


FIGURE 6

Combustible materials should not be used for 5 inches above the mounting flange of the upper frame see Figure 24.

WARNING: DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS (Except as shown in Figure 19 on Page 8).

FRAMING INSTRUCTIONS

Refer to Figure 6 to determine the proper dimensions for constructing the fireplace opening. The fireplace may be positioned and then the framing built around it, or the framing may be constructed and the fireplace pushed into the opening.

INSTALLING YOUR FIREPLACE

The following is a guideline for the safe and efficient installation of the Marco Custom 36 system. Follow these instructions carefully to ensure proper installation and conformance with Marco's warranty.

STEP 1: After consulting Figures 4, 5 and 6 for the proper dimensions, frame the cavity or the opening for the fireplace at the chosen location. Move the fireplace into position, as applicable to your particular framing construction.

STEP 2: Position the fireplace into the framing. Secure the fireplace to the framing at the mounting flanges as illustrated in Figure 7.

STEP 3: Route a 1/2" NPT Black Iron gas line. For routing instructions, see the Gas Line Hookup section immediately following.

STEP 4: Install remote wall switch and run millivolt wire to wall switch (See Remote Millivolt Wiring Section).

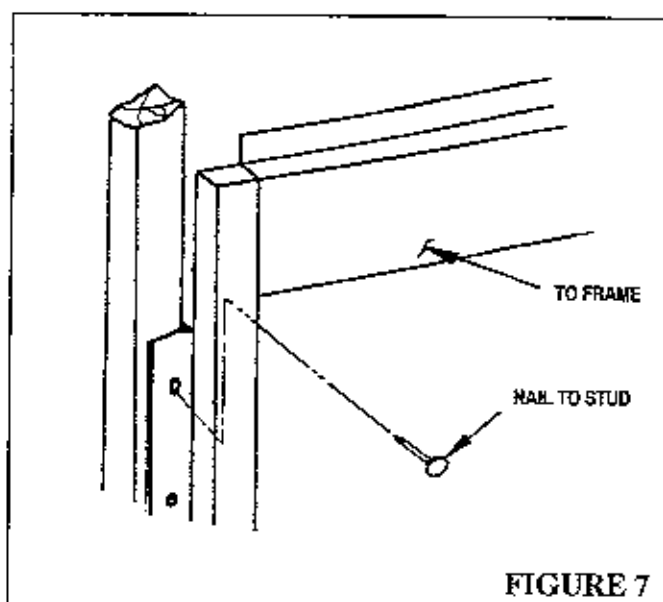


FIGURE 7

GAS LINE HOOKUP

A manual shutoff valve (not supplied by Marco) must be included in the appliance's gas supply system.

Include a plugged 1/8" NPT tapping in the gas line immediately upstream of the appliance's gas supply connection, where it will be accessible for test gauge connection.

Route a 1/2" NPT Black Iron gas line above the floor surface and behind the face of the rough framing (See Figure 8). The gas line may be installed to enter the appliance from either side or the back of the appliance by removing the screws at one of the access holes provided. Refer to Figure 9 on page 5 for entrance locations.

IT IS ESSENTIAL THAT THE FIREPLACE ENCLOSURE BE IN PLACE BEFORE THE GAS SUPPLY LINE IS RUN INTO THE APPLIANCE.

Compounds used on threaded joints of gas piping must be resistant to the action of natural and LP gas. Apply sealant lightly to ensure excess sealant does not enter the gas line.

REMOTE MILLIVOLT WALL SWITCH WIRING

The gas control, pilot generator, heat limit and wall switches have been pre-wired at the factory. Additionally, approximately eight (8) feet of millivolt wire is provided for connecting the appliance to a remote wall switch.

Uncoil the millivolt wire from the right side and select a location approximately five (5) feet off the ground within reach of the wire for the wall switch.

After installing an electrical box, run the millivolt wire to the box and connect to the ON/OFF switch. Install the wall switch and switch coverplate during final assembly.

WARNING: DO NOT CONNECT THE GAS VALVE OR WALL SWITCH TO ANY ELECTRICAL CIRCUIT.

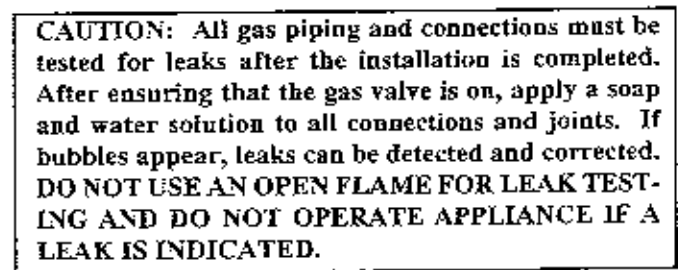
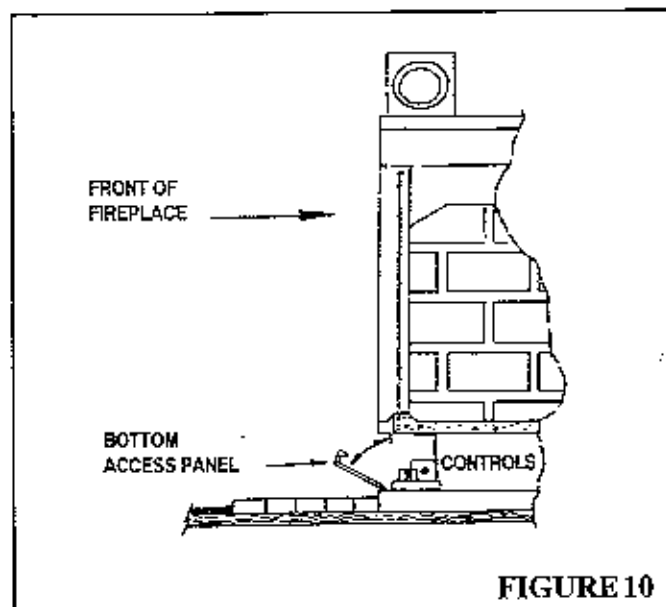


FIGURE 8

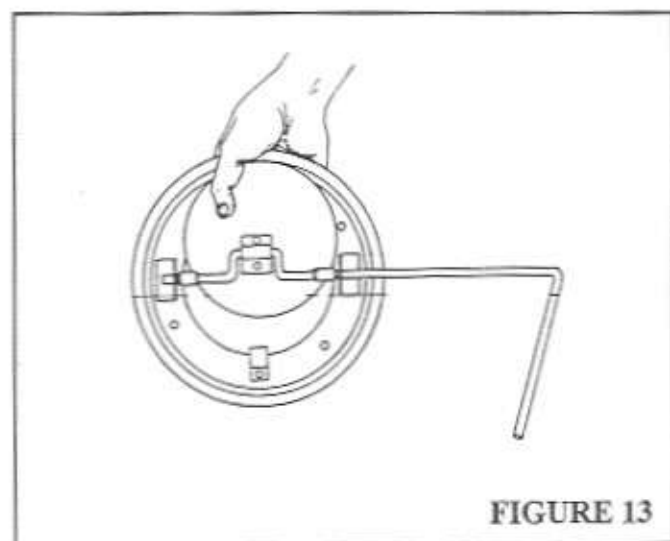
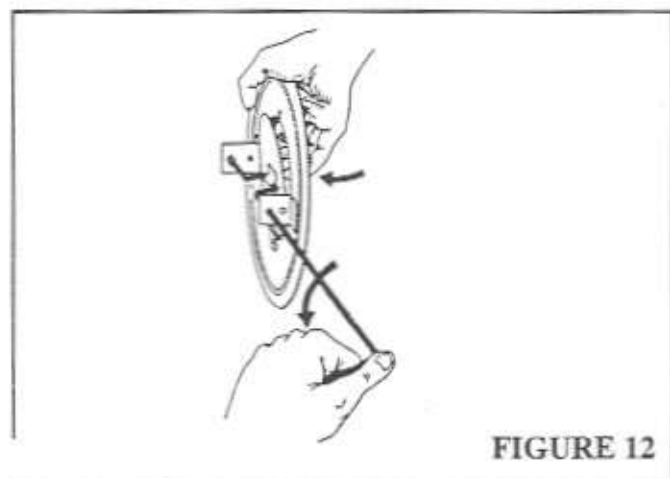
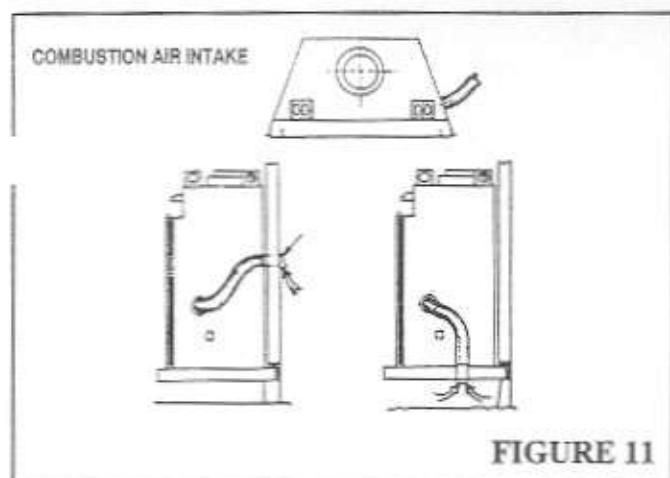
NOTE: If an Outside Air Kit is not being used, proceed to the next section and continue with installation. Otherwise, the Outside Air Kit must be installed at this point.



The installation of an outside air accessory kit is highly recommended. It is very important to ensure good fire-place operation in homes which are tightly weatherscaled or have ventilating appliances installed.

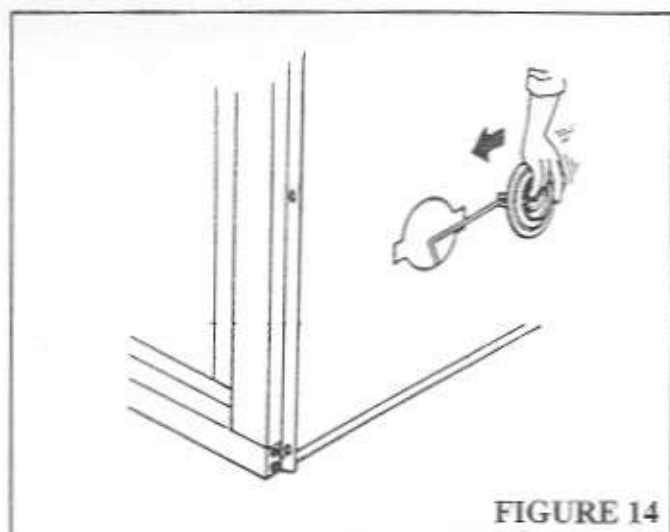
CAUTION: Avoid installing the air inlet where the opening could be blocked by snow, bushes or other obstacles. The maximum height for the outside air inlet is 50' above the hearth, providing the air inlet is terminated a minimum of three (3) feet below the chimney cap level.

5



STEP 2: Remove the air inlet cover from the right hand side of the case (Figure 14). Discard the cover. On some models, the cover may be of the "knock-out" type.

STEP 3: Grasp the outside air gate as shown in Figure 12. To thread it properly into the case, the handle must be turned beyond its normal operating position. Push the upper edge of the blade inward past the stop and rotate the handle until it points straight down.



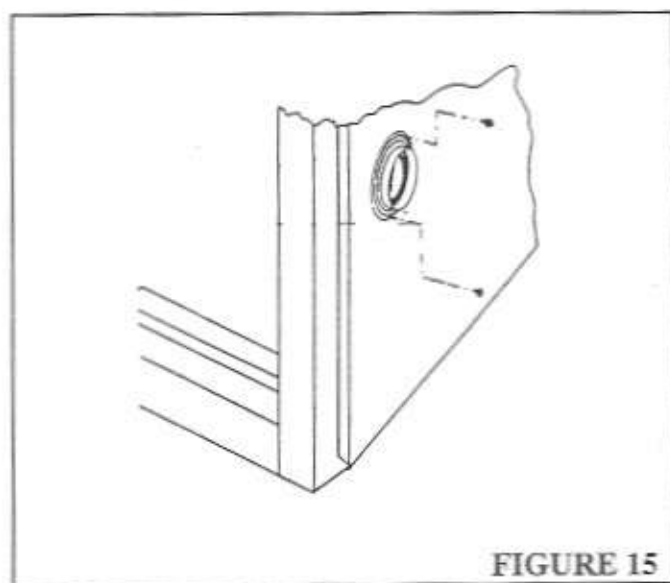
STEP 4: Hold the air gate in the left hand as shown in Figure 13.

STEP 5: Insert the handle into the case as shown in Figure 14. Move the air gate assembly forward into position. Make sure the handle extends through the vertical slot in the front frame side as illustrated in Figure 26.

STEP 6: Four screw holes are provided in the air gate assembly and case body to secure the assembly. At this point, install only two screws at opposite sides of the flange as shown in Figure 15.

STEP 7: Install the air inlet eyebrow through the wall opening as shown in Figure 16. Push a 4" diameter NON-COMBUSTIBLE Class 0 or Class 1 flexible duct onto the eyebrow.

STEP 8: As shown in Figure 17, use the supplied two remaining sheet metal screws and the two clamp brackets to secure the duct to the air gate assembly.



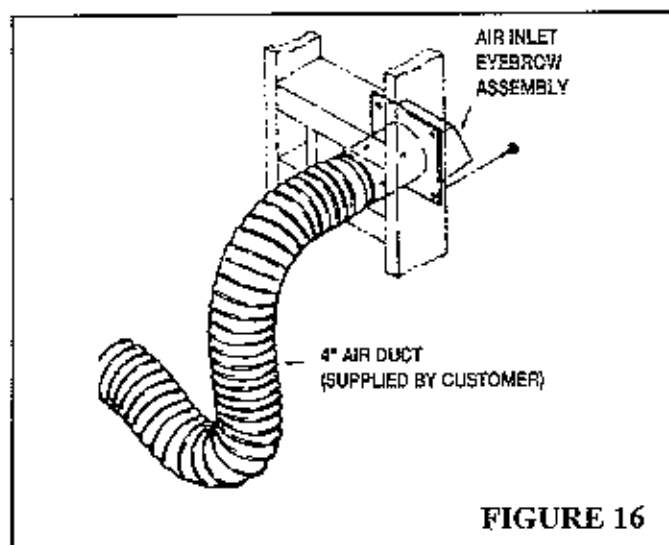


FIGURE 16

INSTALLING THE FIREPLACE'S 5" B-VENT SYSTEM

The appliance's 5" B type venting system must be installed during rough framing. Any UL listed Type B gas vent system may be obtained and utilized for proper venting. Follow the B-Vent manufacturer's instructions carefully when installing. Make sure installation is in accordance with the following guidelines.

CHECK LOCAL BUILDING CODES BEFORE INSTALLING.

B-VENT INSTALLATION

1) BEFORE CONNECTING THE FIRST SECTION OF B-VENT, THE PIPE CONNECTOR PROVIDED WITH THE FIREPLACE MUST BE SECURED TO THE FIREBOX COLLAR WITH TWO 3/4" SHEET METAL SCREWS. (SEE FIGURE 16A.).

2) THE FIRST SECTION OF B-VENT MUST BE SECURED TO THE FIREPLACE PIPE CONNECTOR WITH TWO 3/4" SHEET METAL SCREWS AS SHOWN ON FIGURE 16A.

3) THE SYSTEM MUST BE A MINIMUM OF 12 FEET HIGH FROM THE FLOOR.

4) IF INSTALLING AN OFFSET SECTION, YOU MAY START IMMEDIATELY OFF THE TOP OF THE FIREPLACE WITH A 45 DEGREE ELBOW AND A LENGTH OF B-VENT PIPING. IT MAY EXTEND A MAXIMUM OF 12' TO THE SIDE OR BACK OF THE APPLIANCE WITH NO LESS THAN A 45 DEGREE INCLINE.

5) NEVER VENT THIS APPLIANCE INTO A COMMON VENTING SYSTEM.

CAUTION: DO NOT CONNECT THE VENT OF THIS APPLIANCE TO A CHIMNEY SERVING A SOLID FUEL APPLIANCE.

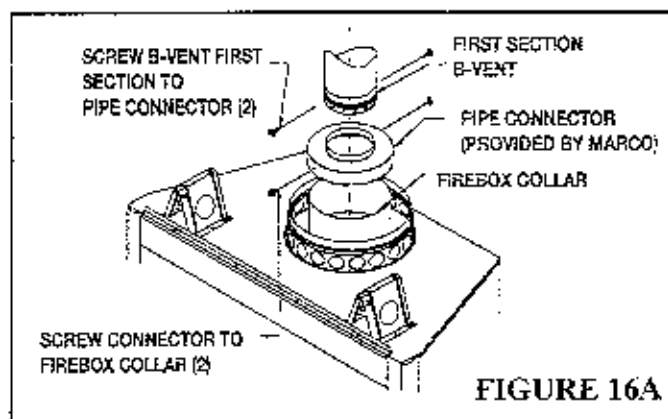


FIGURE 16A

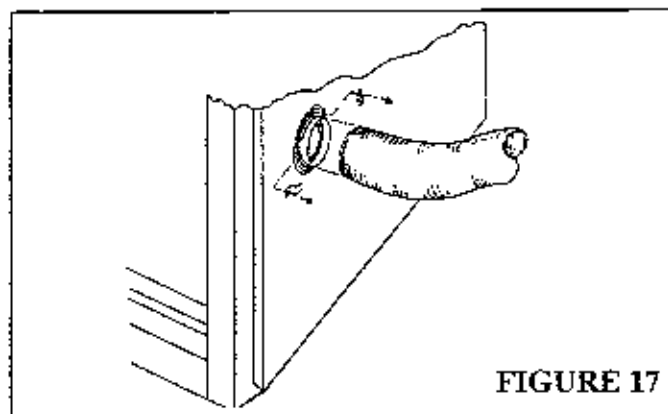


FIGURE 17

OPTIONAL COLD CLIMATE INSTALLATION INSTRUCTIONS

When installing a fireplace in an area where the outside temperature falls below 32 degrees Fahrenheit, it is essential that you protect the appliance's metal bottom from cold air by following one of the following procedures:

- Set the fireplace on a 1/4" or larger plywood as shown in Figure 18; or
- Using a silicone caulking material, caulk the bottom seams of the fireplace between the base pan and outer casing as shown in Figure 18.

NOTE: DO NOT SET THE FIREPLACE ON A CONCRETE SUBFLOOR WITHOUT THERMAL PROTECTION. USE A 1/4" PLYWOOD OR EQUIVALENT.

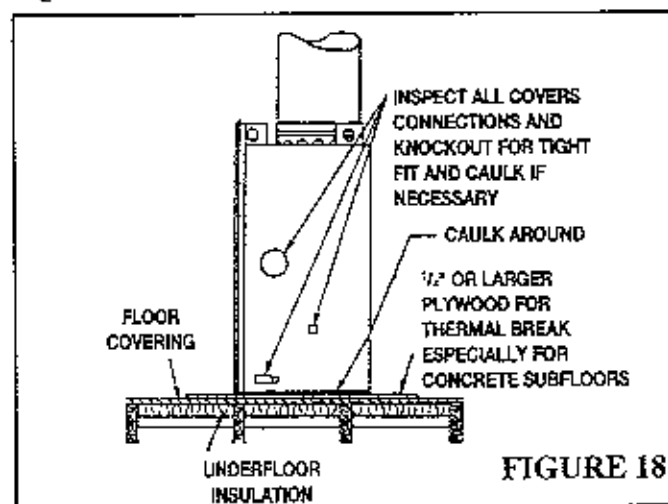


FIGURE 18

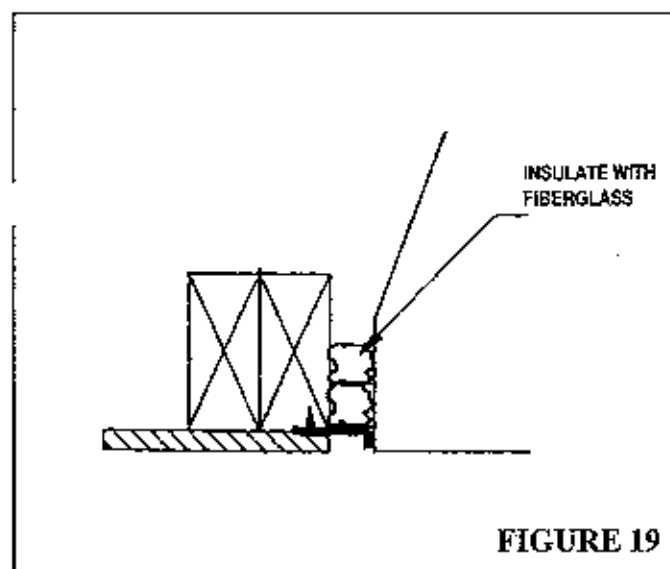
Carefully inspect the Outside Air and Gas Line to ensure a tight fit. Use the caulking material to carefully seal around each of them to ensure that no cold air will leak into the firebox. Insulate the gap left between the sides of the fireplace as illustrated in Figure 19. If the gap is too small to effectively insulate, it may be caulked with the high temperature silicone or equivalent caulking material.

WARNING: BE CAREFUL NOT TO LET THE INSULATION MATERIAL COME IN CONTACT WITH THE FIREPLACE IN THE REQUIRED AIR SPACES.

Carefully check and caulk all cracks around the fireplace where cold air could enter the room.

As a final caution, the finish trim around the front of the fireplace should be carefully caulked between the trim and the fireplace to prevent the entry of cold air and/or the escape of warm air.

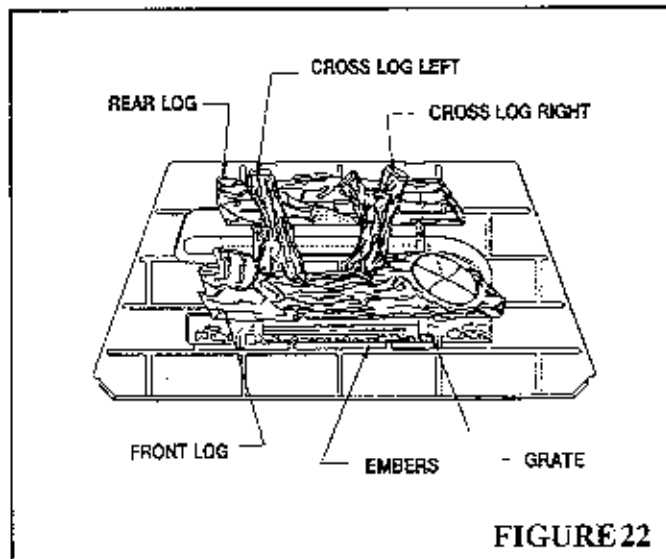
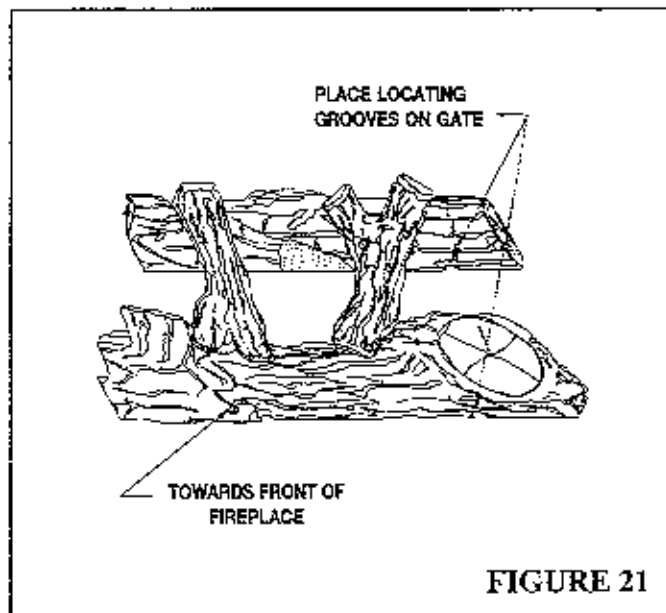
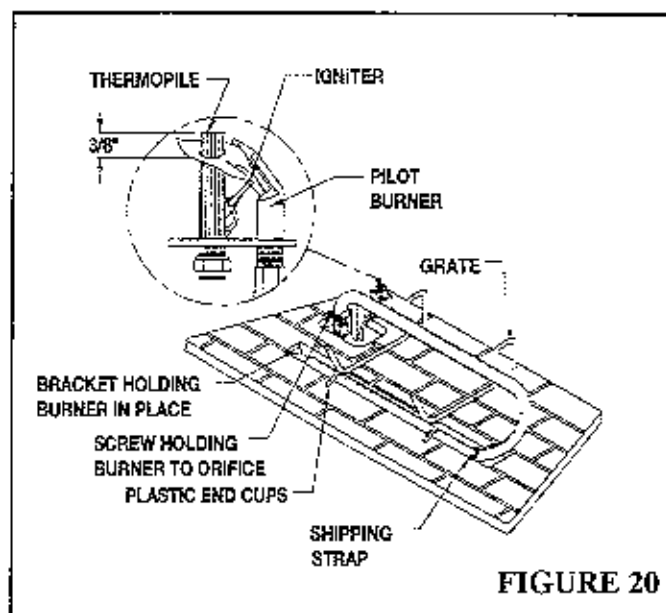
WARNING: THE OPENINGS OF THE COLLAR OR ADAPTER AROUND THE BASE OF THE CHIMNEY OR B-VENT MUST NOT BE OBSTRUCTED. NEVER USE BLOWN INSULATION TO FILL THE CHIMNEY ENCLOSURE.



FIREPLACE GRATE AND LOG PLACEMENT

The Marco Custom 36 uses a standard custom four (4) piece log set. Placement has been marked on the front and back log to provide the exact location. See Figures 21 and 22 for proper placement.

Any time the logs are removed, before and after placing the logs in position, verify that the pilot lights properly and it ignites the burner when the fireplace is turned on.



THE GRATE

The grate has been factory set into position, remove the plastic cups from the front legs before installing the logs. (See Fig. 20).

PLACING THE LOGS

The Marco Custom 36 four (4) piece log sets are provided with alignment slots to ensure proper spacing and location. Refer to Figure 21 and 22.

STEP 1: Locate back log by using grooves on the bottom. See Figure 21.

STEP 2: Place the front log all the way to the front of the grate, it will self center by the shape of the log.

STEP 3: Prepare the glowing embers for placement by tearing the ember material into cotton-ball sized pieces.

STEP 4: Flatten the embers by placing them on a hard surface and "smashing" them flat with your palm, or the side of your fist.

STEP 5: Place the glowing embers evenly along the edge of the burner tube in front of the front log, covering the flame holes. Refer to Figure 22.

STEP 6: Test ignite the fireplace to verify that there is no continuous flame impingement on the logs, and the glowing ember section lites properly. Adjust logs if necessary.

WARNING: THE SIZE OF THE LOG SET WAS ENGINEERED TO GIVE YOUR FIREPLACE A SAFE, RELIABLE AND ATTRACTIVE FLAME PATTERN. ANY ATTEMPT TO USE A DIFFERENT LOG SET IN THE FIREPLACE WILL VOID THE MARCO WARRANTY AND WILL RESULT IN INCOMPLETE COMBUSTION, SOOTING AND POOR FLAME QUALITY.

FINISHING THE FIREPLACE FIREPLACE FACING

When selecting the finish material for your fireplace, it is important to remember the following: **THE BLACK FACE MUST NOT BE COVERED WITH ANY TYPE OF COMBUSTIBLE MATERIAL.** The sides and top of the Marco Custom 36 may be faced to the fireplace with a non-combustible material. However, the bottom control panel may not be obstructed in any way and must be left clear to allow access to the installer and/or homeowner. See Figure 23 for an example of proper fireplace facing.

Non-combustible facing material such as tile, brick, glass, etc. may overlap the black face at the top and sides of the fireplace. Be sure to use a non-combustible heat resistant mortar or adhesive when attaching the finish trim to the fireplace face. The face of the fireplace may be painted to match the room decor provided you use a heat resistant paint. **DO NOT COVER OR BLOCK THE GRILLES ON THE HEAT CIRCULATING FIREPLACES.**

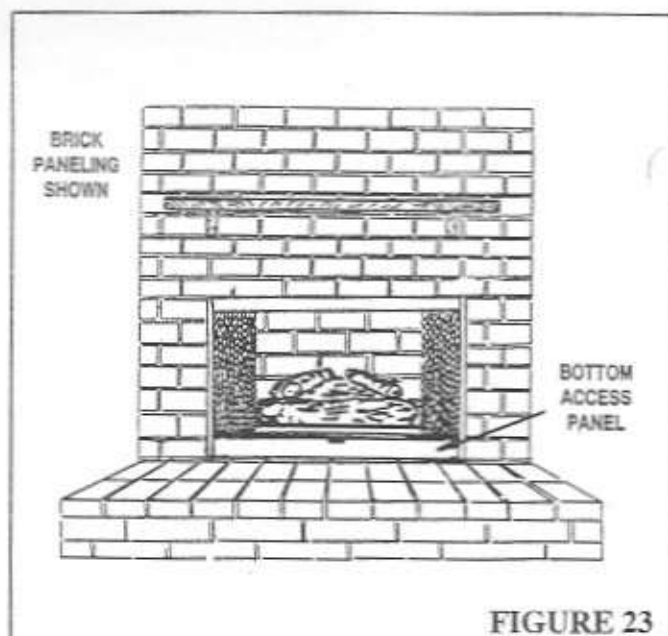


FIGURE 23

NOTE: DECORATIVE FACING MAY NOT EXTEND INTO THE FIREPLACE OPENING AT ALL, BECAUSE IT WILL INTERFERE WITH THE OPERATION OF THE GLASS DOORS.

WHEN COMBUSTIBLE COVERING IS USED, IT MUST NOT COME CLOSER THAN 5" TO THE TOP BLACK FRAME. A NON-COMBUSTIBLE MATERIAL MUST BE USED AS SHOWN ON FIGURE 24.

MANTELS

Combustible mantels may be safely installed provided they do not project beyond the safe zone illustrated in Figure 24.

MANTEL SURROUNDS

Often a decorative surround or vertical portion of the mantel is desired. If this is constructed of any combustible material, it must not cover any portion of the black frame.

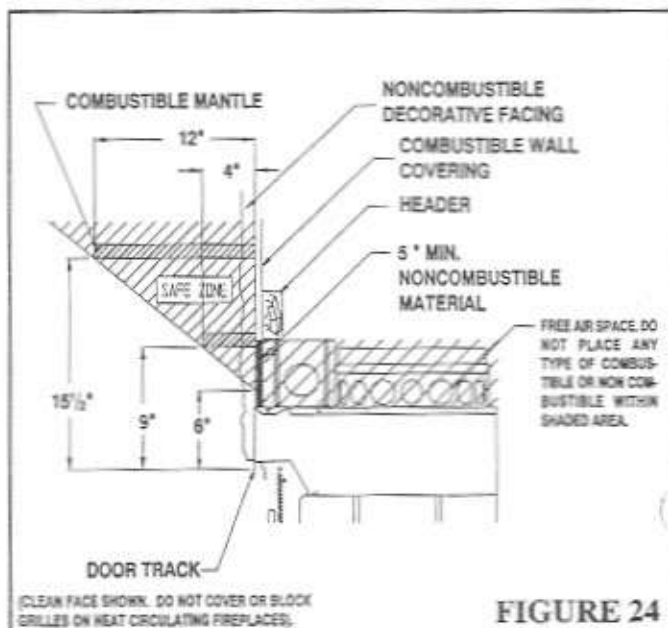


FIGURE 24

OPERATION INSTRUCTIONS

To operate and light this appliance, refer to the lighting instructions on pages 12 and 13 or the instructions and labels located inside the bottom controls compartment. (See Figure 8 on page 5 for compartment location).

The Marco Custom 36 Standing Pilot model is a millivolt type system. It consists of a pilot burner, piezo igniter, a gas control valve and a manual on/off switch. The wall switch is connected in series with a high temperature limit switch.

Approximately the top 3/8" at the pilot generator (thermopile) should be engulfed in the pilot flame as shown in Figure 20 on page 8. Refer to Pilot Adjustment on Page 11.

DAMPER CONTROL LEVER

The damper control lever, located inside the center, top front of the fireplace, was engineered to assist in the safe and efficient operation of your fireplace. The appliance's damper has been connected to a fail safe, shutoff switch. Closing the damper will immediately stop the flow of gas to the burner. The appliance will not light or remain lit if the damper lever is not in the fully open position. To operate, simply move the damper lever to the open position as illustrated in Figure 25.

CAUTION: DURING OPERATION OF THE APPLIANCE, THE DAMPER CONTROL LEVER WILL BECOME VERY HOT. TO AVOID INJURY, YOU MUST ALLOW THE HANDLE TO COOL DOWN OR TAKE PRECAUTIONS TO AVOID BURNING YOURSELF.

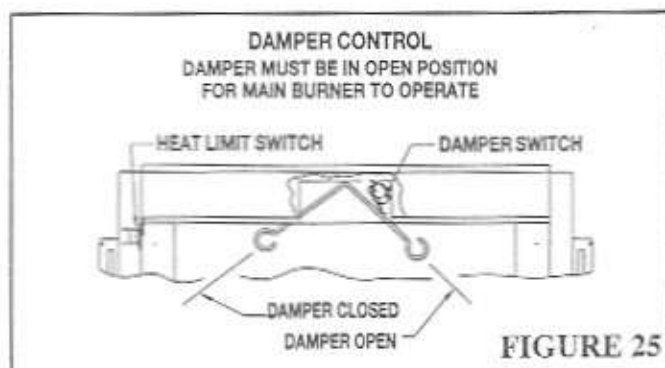


FIGURE 25

FIREPLACE GRATE AND LOG POSITION

The appliance has been equipped with a grate and a four (4) piece log set. The size and position of the grate and log set were engineered to give your appliance a safe, reliable and beautiful flame pattern. **ANY ATTEMPT TO USE A DIFFERENT GRATE OR LOG SET IN THIS APPLIANCE WILL VOID THE MARCO WARRANTY AND IS EXTREMELY DANGEROUS.**

THIS FIREPLACE IS NOT MEANT TO BURN WOOD. ANY ATTEMPT TO DO SO COULD CAUSE IRREPARABLE DAMAGE TO YOUR APPLIANCE AND PROVE HAZARDOUS TO YOUR SAFETY.

OUTSIDE AIR CONTROL

The outside combustion air kit is an optional accessory installed at the time of fireplace installation. It aids greatly in the efficient operation of your fireplace. It should be opened during operation of your appliance. See Figure 26 for operation and location of the appliance's outside air kit.

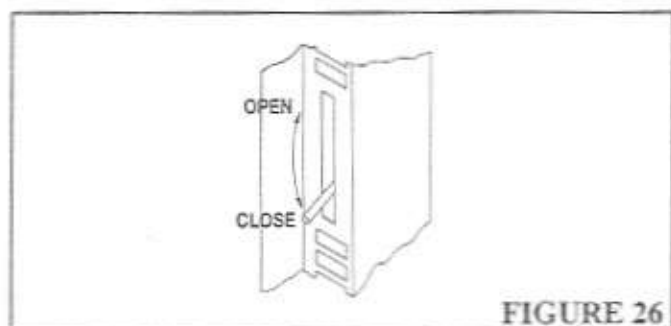


FIGURE 26

OPERATION GUIDELINES AND MAINTENANCE INSTRUCTIONS

1. Upon completing your gas line connection, a small amount of air will be in the lines. When first lighting the appliance, it will take a few minutes for the lines to purge themselves of this air. Once purging is complete, the burner will light and operate as indicated in this instruction manual. Subsequent lightings of the appliance will not require such purging.

2. **BEFORE LIGHTING, CHECK ALL CONNECTIONS WITH SOAP SOLUTION FOR POSSIBLE LEAKS.**

3. When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to the "curing" of the logs and "Burn-in" of internal paints and lubricants used in the manufacturing process.

CAUTION: THE LOGS CAN GET VERY HOT -- HANDLE ONLY WHEN LOGS ARE COOL.

CAUTION: DURING OPERATION, THE DAMPER HANDLE WILL BECOME VERY HOT. ALLOW TO COOL BEFORE OPERATING OR TAKE PRECAUTIONS TO PROTECT YOURSELF FROM BURNS.

4. Keep the control compartment, logs, burner and area surrounding the logs clean by vacuuming or brushing at least twice a year. In order to properly clean the burner assembly, remove the logs and expose the burner. **BEFORE VACUUMING, MAKE SURE TO REMOVE THE APPLIANCE'S GLOWING EMBERS.**

5. Always turn off the gas at the valve before cleaning. As a further precaution, close the fireplace's damper and turn off the electricity to the appliance. Before relighting, refer to the lighting instructions located in the appliance's bottom control panel.

6. The appliance and venting system should be inspected before use and/or annually by a qualified service person.

IMPORTANT: Turn off the gas and the wall switch before servicing the appliance. It is recommended that a qualified serviceman perform these checkups annually before beginning the appliance's seasonal use. Any guard removed for servicing an appliance must be replaced prior to operating the appliance.

WARNING: Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance.

7. Always keep the area surrounding the appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.

8. Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials.

9. Periodically perform a visual check of your appliance's flame pattern. Refer to Figure 27 below.

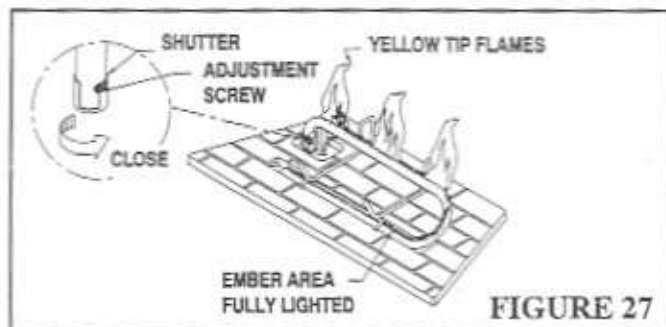
AIR SHUTTER ADJUSTMENT

The air shutter on the burner has been set at the proper position at the factory. However, due to the altitude conditions, it may be necessary to adjust the air mixture as follows:

Remove the logs to expose the burner, then loosen the air shutter screw and rotate the shutter to the left or right as needed while watching the flame on the burner to achieve a yellowish flame. Once it is esthetically acceptable, not too dark not too light, retighten the air shutter screw. (See figure 27). To reposition the logs, follow the instructions on page 8.

Note: opening the air shutter increases the air to gas mix in the burner, it produces a bluer, shorter and cleaner burning flame. Closing the air shutter reduces the air to gas mix producing a longer yellow flame.

Sooting: In most environments, the air shutter can be fully closed, but if there is any evidence of sooting (with logs properly positioned), the air shutter should be adjusted. **Warning:** The burner can get very hot. Use heat protection on your hands when adjusting the burner to avoid injury.

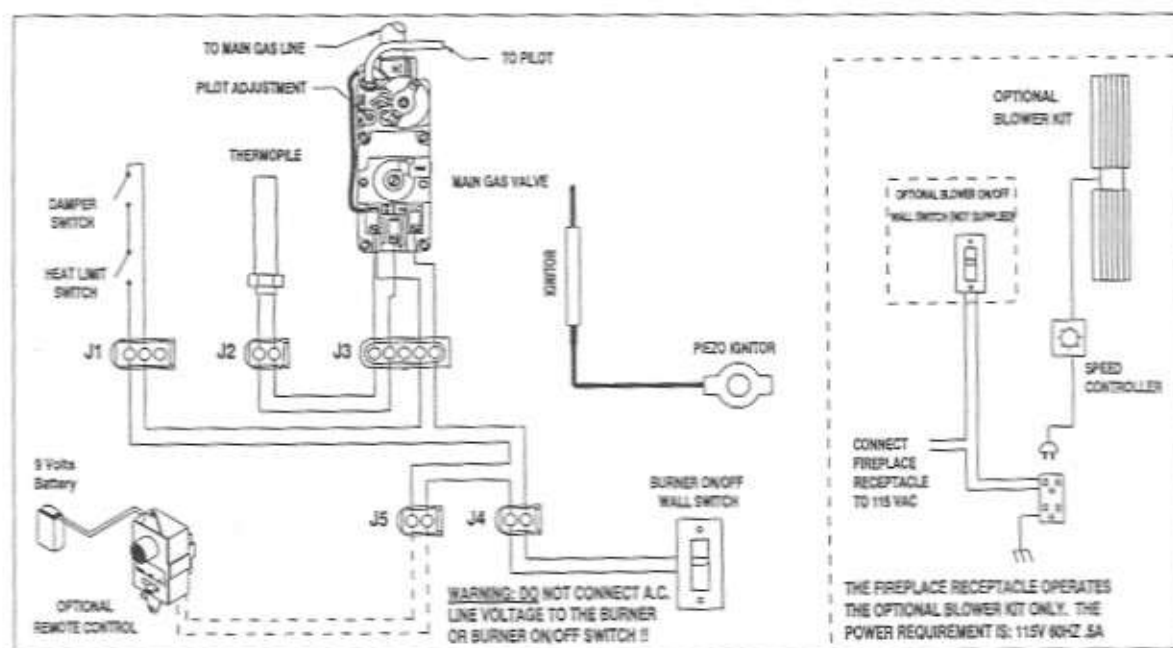


PILOT ADJUSTMENT

The pilot flame has been set at the factory and usually further adjustment is not required. If for any reason the pilot needs to be adjusted, follow these instructions.

1. Remove pilot adjustment cap on main valve (See Wiring Diagram below).
2. Adjust pilot screw to provide properly sized flame, enough to engulf the thermopile for at least 3/8 of an inch. Turning the adjustment screw clockwise reduces the pilot flame. Counter clockwise increases the pilot flame. (Refer to Figure 20 for details). Replace pilot adjustment cap screw when done.

WIRING DIAGRAM



NOTE: If needed, replace original wiring with type AWM 125 C wire, or equivalent.

Lighting and Shutdown Instructions and Cautions

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 lit manually. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING**, smell all around the appliance area for any gas odor. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- C. Use only your hand to push in and rotate the gas control knob. Never use tools. If the knob will not push in or rotate by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

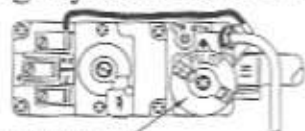
WHAT TO DO IF YOU SMELL GAS:

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

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information on page 12.
2. Turn wall switch to "OFF" position, than open bottom access panel.
3. Push regulator gas control knob in slightly and turn clockwise → to "OFF".
NOTE: knob can not be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
6. Rotate knob on gas valve regulator counterclockwise to "PILOT". ←
7. Push in control knob all the way and hold. Immediately light the pilot by pressing the Pilot Igniter Red Button. 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.

GAS VALVE
REGULATOR



GAS CONTROL KNOB

4. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information section on page 12. If you don't smell gas, go to next step.
5. Find Pilot and Pilot Igniter. Follow aluminum tube from gas control. The pilot is behind the burner to your left hand side.

The pilot igniter is located below the gas valve regulator. Look for the red button.



- If it pilot goes out, repeat steps 3 through 7.
- If knob does not pop up when released, stop, turn the gas shut-off valve and immediately call your service technician or gas supplier.

If pilot will not stay lit after several tries, turn the control knob to "OFF" and call your service technician or gas supplier.

Rotate gas control knob counterclockwise to "ON" ←

and close the bottom access panel. Your fireplace is ready to operate from the wall switch.

TO TURN OFF GAS TO APPLIANCE

1. Turn off fireplace at wall switch and disconnect electrical power if connected before service is to be performed.
2. Open control access panel.
3. Push in gas control knob slightly and rotate clockwise to "OFF." Do not force. →
4. Close control access panel.

TROUBLESHOOTING THE MARCO CUSTOM 36 ELECTRIC PIEZO IGNITOR AND GAS CONTROL SYSTEM

Our Marco Custom 36 Fireplace has been designed to provide you with years of trouble free operation. If, However, you do experience a problem lighting your unit, the following guidelines will help you to correct the problem. Refer to the Wiring Diagram in page 11 and the Replacement Components list on pages 16 and 17 to help you identify the specific components of your gas appliance. If the corrective actions do not solve the problem or you are not sure of the problem, contact a qualified service technician for repair.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Piezo Spark Igniter will not light pilot after repeated triggering of red button.	Defective Igniter (no spark at electrode). Defective Or Misaligned Electrode At Pilot Assembly (Spark Will Not reach Pilot Or Leaks Out).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected to the Piezo Igniter, replace the igniter. Check gap at electrode and pilot. It should be about 1/8 inch to have a strong spark. Reposition if needed. If spacing is all right and spark is not visible, replace pilot assembly.
2. Pilot will not light.	Gas Valve Regulator Not Turned On. Air On The Gas Line.	Be sure external gas shut-off valve, located at the gas supply inlet, is in the "ON" position. Follow the lighting instructions on page 13. Using a match, light pilot. If pilot lights on and off or flame appears weak, an improper gas mixture may be the cause. A longer purge period is recommended. If the pilot lights using a match but will not light with the igniter spark. Align igniter electrode to spark right to the pilot. The distance must be 1/8".
3. Pilot will not stay lit after releasing Gas Control Knob.	Pilot Flame May Be Too Low Or Blowing (High) Causing The Pilot Safety To Drop Out. Pilot Generator Defective (Thermopile). Gas Valve Regulator Defective.	Check pilot flame. It must impinge on pilot generator (thermopile). Clean and or adjust pilot for a maximum flame contact on thermopile tip as shown on Figure 20. Be sure wire connections from thermopile to gas valve regulator are tight and according to the diagram on page 11. Thermopile must be fully inserted into pilot bracket and secured with the brass nut. Keep the pilot on by holding the gas valve knob depressed on the PILOT position. With a millivolt meter, check thermopile terminals at gas valve regulator (Marked TP and TH/TP). It should be 325 millivolts minimum. Wall switch must be on "OFF" position. Replace faulty thermopile if reading is below specified minimum. Replace gas valve regulator if reading is the specified minimum voltage.
4. No gas to burner. Pilot burning, valve knob "ON", wall switch "ON".	Gas Valve Regulator Defective. Wall Switch Defective. Heat Limit Switch or Damper Switch Defective. Pilot Generator (Thermopile) May Not Be Generating Sufficient Voltage. Gas Valve Regulator Defective.	With gas valve regulator and wall switch turned to "ON", check for continuity on the gas valve connections to the wall switch. If okay, replace gas valve regulator, if NOT OKAY: With a jumper cable, bridge the connections on the wall switch. Replace it if burner comes on. Repeat the above procedure to the Heat Limit Switch and Damper Switch. Replace it if the burner comes on. Turn gas valve to "ON", place wall switch to "ON". Take a reading on the valve connections to the thermopile, Millivolt reading should be greater than 100 MV. Replace thermopile if less than 100 MV. Replace gas valve regulator if reading is greater than 100 MV and burner won't light.
5. Burner flame too low, too light or too dark.	Plugged Burner Orifice/ Plugged Burner. Air Shutter Needs Adjustment.	Clear the burner ports and burner orifice of debris or anything that might obstruct the passage of gas. Adjust air shutter according to the instructions given on page 10.

DO'S AND DON'TS

- Read operation and warranty manuals thoroughly before installing and using this fireplace.
- Be sure the Damper and outside air gate (if installed), is open before attempting to start the appliance.
- **IMPORTANT:** Always turn off the gas and electricity to the appliance before servicing and/or cleaning the fireplace. Allow the appliance's logs to cool before cleaning and/or servicing.
- Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and/or any gas control which has been under water.
- **DO NOT BURN WOOD IN THIS FIREPLACE. ANY ATTEMPT TO DO SO WILL VOID THE MARCO WARRANTY AND COULD PROVE EXTREMELY HAZARDOUS.**
- Periodically clean and examine the appliance's burner, grate and venting system.
- Periodically perform a visual check of your appliance's flame pattern. Refer to Figure 27 on page 11.
- Do not block the appliance's bottom control panel. It must be available for operator or technician access.
- **CAUTION: OPERATE THE DAMPER AND OUTSIDE AIR GATE HANDLE CAUTIOUSLY. AFTER APPLIANCE'S OPERATION, IT CAN BECOME VERY HOT DURING USE.**
- Keep the area in front of the appliance free from combustible materials such as drapes, paper products, wood storage, furniture, etc. Do not store gasoline or other flammable vapors and liquids nearby.
- The glass used in Marco fireplace doors is quality tempered (safety) glass, produced and tested to National Standards. The tempering process for glass requires that it be raised to an elevated temperature. Over time, operation at high temperatures will partially reverse this process. Do not allow your appliance's logs to become in contact with the glass. The chances of glass breakage increases when this occurs. Glass breakage is not covered under your warranty.
- Check the firebox's refractory for cracks and damage. Because the firebrick refractory is repeatedly heated and cooled, this can cause hairline cracks to form. This is normal and does not damage the fireplace. If, however, a crack should become large, (1/16" wide or larger) the refractory should be replaced.
- **CAUTION: PROLONGED OPERATION AT EXCESSIVE TEMPERATURES MAY CAUSE THE GLASS TO PARTIALLY LOSE ITS TEMPER (SAFETY FEATURE).**

- Do not obstruct the flow of combustion and ventilation air.
- **NEVER USE BLOWN INSULATION TO FILL THE CHIMNEY ENCLOSURE.**
- When installing this appliance in cold climate areas, be sure to follow the cold climate instructions outlined in this booklet.
- **Have repairs done by a qualified service technician.**
- **Note:** This appliance has been designed as a vented decorative gas appliance and is not a primary source of heat.

WARNING: THIS FIREPLACE IS NOT INTENDED TO BE USED WITH COMPONENTS OTHER THAN THOSE SPECIFIED IN THIS MANUAL. USE OF UNAUTHORIZED COMPONENTS COULD BE A SERIOUS FIRE HAZARD AND WILL AUTOMATICALLY VOID YOUR APPLIANCE'S WARRANTY.

CUSTOMER SERVICE

Keep this manual where you can easily find it. If you have any problems, review it for possible solutions. If the problem continues to persist, contact the appliance's installer or the Marco Dealer or Distributor. A qualified service repairman may also be contacted for service after the warranty period. Consult your local telephone directory. If for some reason you are unable to get the assistance you require, a customer Service Representative at the Marco factory is available to help you.

Please contact:

Marco Customer Service (323) 564-3201

Outside California (800) 232-1221

Hours: 7:30 A.M. - 12:00 P.M. (Pacific Time)

1:00 P.M. - 4:30 P.M. (Pacific Time)

REFERENCE DOCUMENTS

1. Cabinet Glass Door Kit Installation Instructions P/N 181697.
2. Bifold Glass Door Kit Installation Instructions P/N 181691.
3. Outside Air Kit Installation Instructions P/N 181682.
4. Remote Control Installation Instructions P/N 181337.
5. Fan Kit Installation Instructions P/N 181778.

HOW TO ORDER REPAIR PARTS

1. Please refer to the Replacement Parts list and diagram when ordering replacement parts for your appliance. It contains proper names and part numbers of each component to assist you when and if you need to order.

2. When possible, order repair parts for your appliance from the dealer where it was purchased.

3. Be sure to give the part number, the name of the part and the fireplace stock

number. The stock number is printed on the Rating Plate located on the inside of the bottom control panel.

4. A stock certificate is sent with the order, indicating a receipt for replacement.

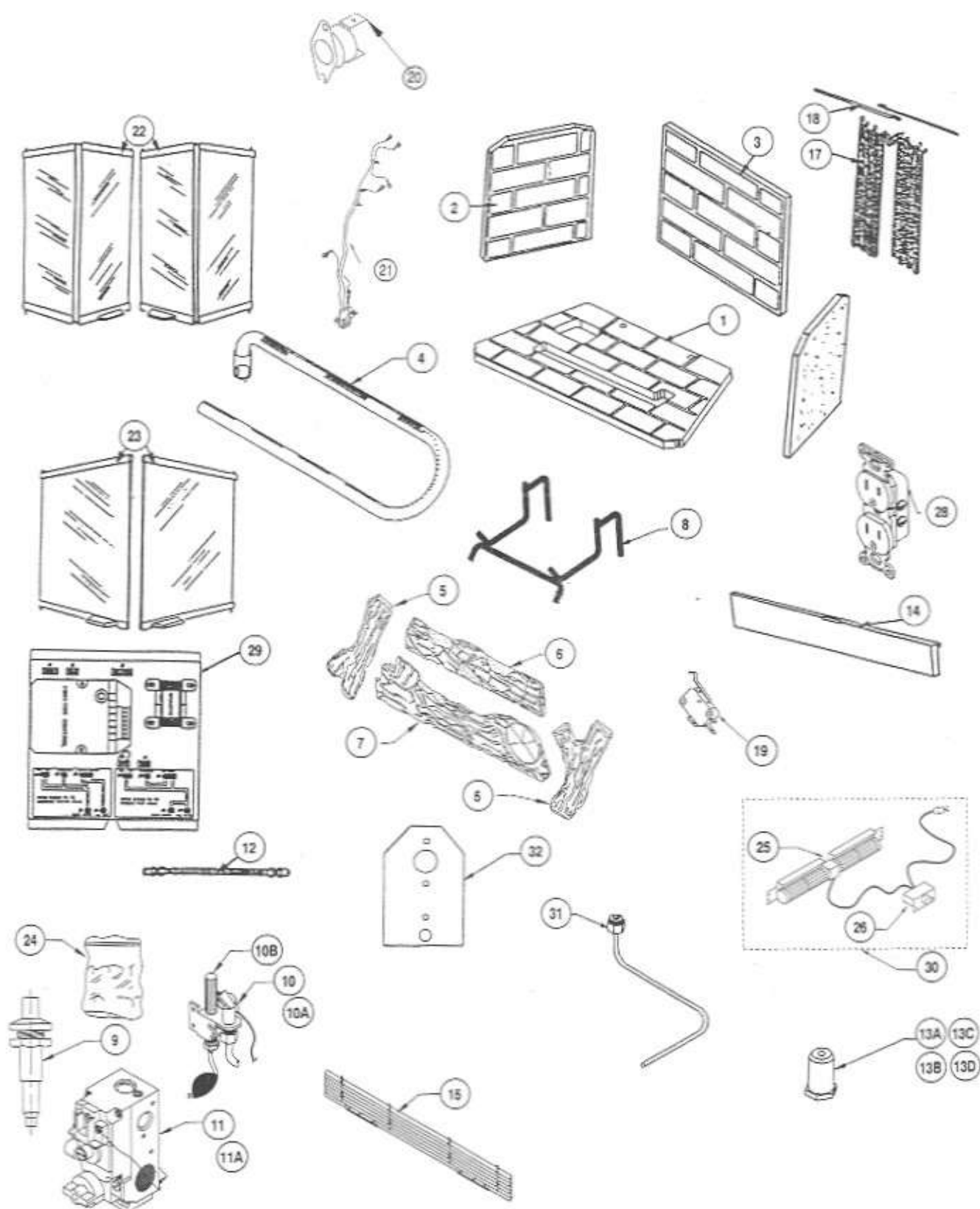
5. There is a minimum charge of \$17.00 plus postage for each order.

6. All parts are subject to change without notice.

REPLACEMENT PARTS LIST		
ITEM	PART #	DESCRIPTION
1	164690	Hearth Refractory
2	164604	Side Refractory
3	164603	Back Refractory
4	198494	Gas Burner Assembly
5	164663 & 64	Cross Logs, Right and Left
6	164691	Rear Log
7	164692	Front Log
8	480181	Grate
9	116140	Piezo Igniter
10	495105	Pilot Assembly, Natural Gas
10A	495106	Pilot Assembly, Propane
10B	116139 598	Thermopile - 26"
11	495103	Regulator Valve, Natural Gas
11A	495104	Regulator Valve, Propane
12	198440	Corrugated Flex Hose
13A	495009	#43 Orifice - Natural Gas
13B	495010	#54 Orifice - Propane
13C	495011	#45 Orifice - Natural Gas High Altitude
13D	495012	#55 Orifice - Propane, High Altitude
14	499154	Lower Door Assembly (Clean Face)
15	499548	Lower Grille Assembly (Heat Circulating)
16	112957	Remote Jumper Cable Assembly (Not Pictured)
17	161126	Screens with Pulls
18	498168	Screen Rods
19	112947	Damper Switch
20	112948	Heat Limit Switch
21	113374	Heat Limit Switch Wire Harness
22	793410	Bifold Glass Door Assembly
23	793417	Cabinet Glass Door Assembly
24	198441	Glowing Embers (1 bag)
25	112967	Circulation Blower
26	499744	Speed Controller
28	112969	Receptacle
29	499731	Electronic Service Module, (ESM Standing Pilot)
30	794563	Fan Kit Optional
31	198491	Burner Gas Line Tubing
32	499074	Bracket Heat Limit Switch

LOG SET
PART # 794124

REPLACEMENT PARTS DIAGRAM



MARCO DECORATIVE GAS APPLIANCES 20 YEAR LIMITED WARRANTY

A. BASIC WARRANTY

Marco Mfg., Inc. ("Marco") warrants its Decorative Gas Appliance Model MGC36 to be free from defects in materials and workmanship at the time of manufacture. This warranty covers only the original consumer purchaser at the original installation of a fireplace system installed and operated in accordance with the appropriate installation and operating instructions. This warranty extends to specific components for the periods specified below.

B. IMPLIED WARRANTY LIMITATION

NO IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, EXTEND BEYOND THE RESPECTIVE PERIODS SPECIFIED BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

C. PERIODS OF COVERAGE

Except for special parts covered in Section D below, Marco will repair, replace or refund the original list price, at Marco's option, in accordance with the following schedule:

1. **First Year**--Marco will supply parts, at no charge (F.O.B. factory), and reasonable labor costs to repair or replace components of the fireplace system. Labor costs must be approved in advance by Marco and shall not exceed twice the retail price of the replacement parts.
2. **Second through Fifth Year**--Marco will supply parts only, at no charge (F.O.B. factory), to repair or replace components of the fireplace system.
3. **Sixth through Tenth Year**--Marco will supply parts only, at 50% of the list price in effect at the time (F.O.B. factory), to repair or replace components of the fireplace system.
4. **Eleventh through Twentieth Year**--Marco will supply parts only (if they are available), at the then current list price (F.O.B. factory), to repair or replace components of the fireplace systems.

D. SPECIFIC COMPONENT EXCEPTIONS

The life of the following parts and components of the fireplace system is dependent upon the environment and the care and usage by the consumer. Warranty for these components is as specified below:

Gas Components: The warranty for the gas components not manufactured by Marco is for a period of two years from the date of installation of the appliance. Marco will, at its option, repair or replace a defective component. In order to receive a warranty credit, the defective part must be returned in exchange for the new one.

For Standing Pilot Models: A replacement regulator, pilot or thermopile will be provided in exchange for the defective one; and

For Electronic Ignition Models: A replacement low voltage transformer, direct spark ignition assembly, regulator valve and damper or heat limit switch will be provided in exchange for the defective one.

Such repair or replacement will be at no charge, except for the cost of shipping components from Marco's nearest factory. Marco will also pay for reasonable labor costs to repair or replace such components. If repair or replacement of a defective component is not commercially practicable, Marco will refund the wholesale price of the defective component.

REMOTE CONTROL: The remote control is warranted for a period of six months from the date of its purchase. Thereafter, parts will be available at the then current list price.

GAS LOGS: Gas logs are covered for two years against material and workmanship defects and against destruction by fire or heat. The warranty does not cover hairline cracks, or log breakage that is the result of mishandling.

GRATES: The grate is warranted for a period of ninety days. Thereafter, parts will be available at the then current list price.

BLOWER, VARIABLE SPEED SWITCH & WIRE SCREENS: Parts or assemblies are warranted for a period of one year. Thereafter, parts will be available at the then current list price.

GLASS: Breakage of glass is normally due to handling and shipment. Glass breakage is not covered by this warranty. Replacement doors for currently manufactured fireplaces will be available at the list price. The dimensions and specifications for replacement glass panels for obsolete units will be made available upon request.

REFRACTORY COMPONENTS: Marco will supply parts or material only, at no charge, to repair or replace defective refractory, for a period of one year. This policy does not apply to small hairline cracks in refractory which do not affect the safety and operation of the fireplace. This policy does not apply to refractory which has been broken during installation of the fireplace. After one year, replacement refractory will be made available at the then current list price.

TERMINATIONS: The venting termination is subject to a wide variety of environmental conditions. Marco will supply parts only at no charge (F.O.B. factory), for a period of one year. Thereafter, venting terminations will be available at the then current list price.

E. LIMITATIONS, EXCLUSIONS AND LIMITS OF LIABILITY

1. This warranty applies only to the original owner and the original installation.
2. Warranty periods run from the original date of installation. If this date cannot be verified, the date of manufacture shall be used. Claims must be made in writing to Marco or a Marco dealer or distributor within the warranty periods.
3. The warranty does not cover heat loss due to the passage of heat or cold air through or around the fireplace, as this condition can be affected in a major way by the installation and insulation of enclosures.
4. The fireplace is not intended to be a substitute for a primary heating appliance to heat an entire home. It should be used for supplemental heating only. No claims are made by Marco as to the heat output of the fireplace system.
5. Marco makes no representation of warranty regarding local building code compliance and shall not be responsible for compliance therewith. As building codes vary widely, the installer should determine in advance if any special restrictions or requirements apply to the fireplace system.
6. The warranty is void if, in the opinion of Marco, the fireplace system has been improperly installed, abused, misused, tampered with, altered, or used with accessories not supplied or approved by Marco.
7. The warranty does not cover painted surfaces damaged during handling or installation.
8. The warranty does not cover removal and replacement of any portion of the structure in which the fireplace is situated, made necessary by the repair, removal or re-installation of the fireplace system.
9. All parts are shipped F.O.B. our factory.
10. Marco shall not have responsibility for any special, incidental, contingent or consequential damages of any kind resulting from defects in the fireplace. The exclusive remedy for breach of the limited warranty is, at the option of Marco, repair, replacement or the refund of the original list price. In no event shall Marco's liability exceed the original list price of the fireplace system. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
11. The appliance must not be removed after it is installed.
12. The appliance must be operated at all times in accordance with the operating instructions furnished with it. Only natural gas or propane may be burned; burning wood, coal or other solid fuels will void this warranty.
13. Removal of the appliance's logs or burner, and on Direct Vent models only the appliance's fixed glass door, will void this warranty (unless removed and immediately replaced for normal maintenance).
14. The warranty does not apply if the fireplace has been modified, or used, with any component part that is not manufactured or approved by Marco for use in the applicable Margas fireplace system.
15. Neither Marco's employees nor Marco's dealers have any authority to make any warranties on behalf of Marco or to authorize any remedies in addition to, or different from, those described above.
16. The appliance's installer or local gas company must test the system before Marco can be called with a warranty claim.

F. SPECIFIC LEGAL RIGHTS

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

G. HOW TO OBTAIN WARRANTY SERVICE

After having the installer or gas company confirm the problem, notify Marco as soon as possible after the defect is discovered. Send your claim, along with the date of installation and a description of the defect in writing to:

Marco Mfg., Inc.,
Customer Service
2520 Industry Way,
Lynwood, CA 90262
(323) 564-3201
(800) 232-1221

Marco has the right to investigate any alleged defects and to decide what to do. Marco will not be responsible for any work done without first obtaining Marco's permission.



MARCO MFG. INC.

2520 Industry Way, Lynwood, CA 90262 (323) 564-3201 • (800) 232-1221

P/N 181342H 2/98