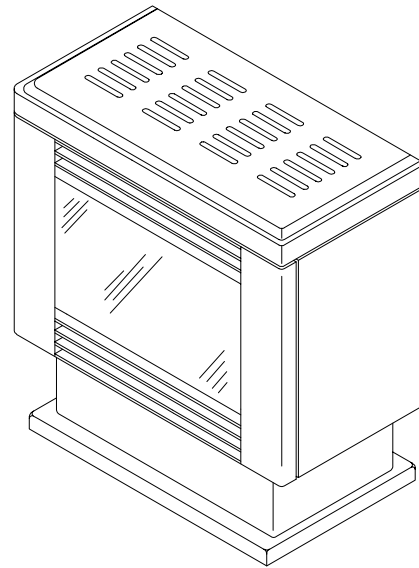


*The
Mirage*
SERIES A

**DIRECT VENT
ROOM HEATER**



INSTALLATION AND OPERATING INSTRUCTIONS

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 vapours 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 neighbour'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.

**IMPORTANT: THESE INSTRUCTIONS
ARE TO REMAIN WITH THE
HOMEOWNER**



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CAUTION

FOR YOUR SAFETY - Do not install or operate your Pacific Energy Mirage without first reading and understanding this manual. Any installation or operational deviation from the following instructions voids the Pacific Energy Gas Stove Warranty and may prove hazardous.

This 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)

This 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 less than 1/2 psig. (3.5 kPa)

Note: When lit for the first time, the appliance will emit a slight odour for a couple of hours. This is due to the curing of paints, sealants and lubricants in the manufacturing process. This condition is temporary. Open doors and windows to ventilate area. Smoke and fumes caused by the curing process may cause discomfort to some individuals.

SAFETY

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

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.

Clothing or other flammable material should not be placed on or near the appliance.

Any grill, panel or door removed for servicing the unit must be replaced prior to operating. Failure to do so may create a hazardous condition.

Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

It is Pacific Energy's policy that no responsibility is assumed by the Company or by any of its employees or representatives for any damages caused by an inoperable, inadequate, or unsafe condition which is the result, either directly or indirectly, of any improper operation or installation procedures.

MAINTENANCE

Caution: Turn off gas and electrical power supply and allow ample time for unit to cool before servicing appliance. It is recommended that this appliance and venting should be inspected at least once a year by a qualified service person.

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

Annual Inspection:

a) Clean louvres and air passage ways of excessive lint build-up from carpeting, bedding material, etc. The flow of ventilation air must not be obstructed.

b) Remove glass panel and log set. Inspect logs and burner assembly for lint and soot build-up. If excessive build-up of soot is present, have a qualified serviceman inspect and adjust unit for proper combustion. Clean logs and burner with a vacuum cleaner, paying close attention to the ports on the burner.

c) Check the pilot system for proper flame size and operation. Clean pilot free of lint and dust (See Fig. #1).

d) Check that the vent pipe and vent terminal are open and free from blockage or debris.

e) Check glass panel gasket, replace if necessary.

Note: The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.

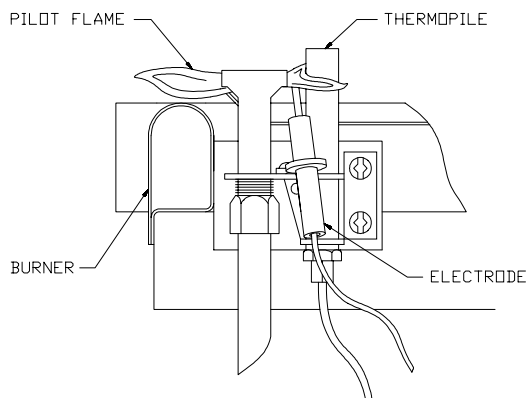
Periodically:

a) Viewing glass may be cleaned with glass cleaner.

b) Exterior porcelain enamel finish may be cleaned with soap and water.

Note: Never use abrasive to clean this appliance.

Fig. # 1





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.

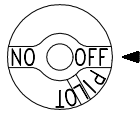
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO 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 neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this page.
2. Set wall thermostat to lowest setting. (if applicable)
3. Turn off all electric power to the appliance.
4. Turn burner control dial clockwise  to "Off" position.
5. Partially depress and turn gas control dial clockwise  past "Pilot" to "Off" position.

MAIN VALVE

Gas control knob shown in OFF position



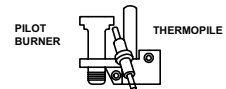
Note: Knob cannot be turned from "Pilot" to "off" unless knob is pushed in slightly. Do not force.


6. Allow sufficient length of time (minimum 5 minutes) for any gas in the combustion chamber to escape. If you still smell gas, STOP! Follow "B" in the safety information on above on this page. If you don't smell gas, go to the next step.
7. Turn gas control knob back to "Pilot" position.
8. Depress gas control knob fully and hold while you ignite pilot with the rotary igniter. Once the pilot ignites, continue depressing knob for approximately 1/2 minute. If pilot does

not stay lit, repeat steps 4 through 7, allowing a longer period before releasing gas control knob.

- If gas control knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control dial to "off" and call your service technician or gas supplier.


9. To normally light the pilot, use the rotary igniter.
10. To light pilot by hand, remove front glass panel. Locate pilot just behind the front log and to the right. Repeat steps 5 through 8, lighting the pilot with a match instead of rotary igniter.



11. Replace front glass panel.
12. Turn gas control knob counter-clockwise  to "On" position.
13. Turn on all electric power to the appliance.
14. Set wall thermostat to desired setting. (if applicable)

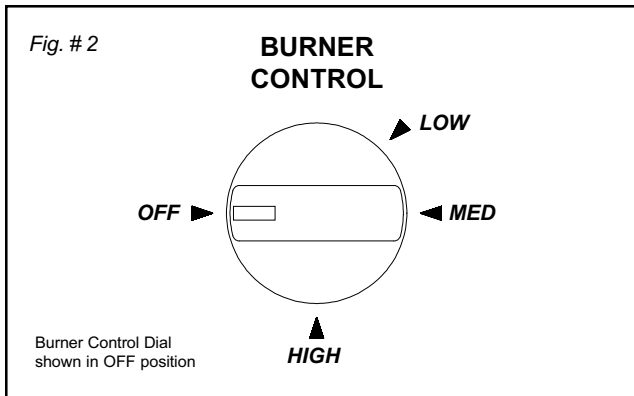
Note: Sufficient time must be allowed for air to escape from lines if the unit is being lit for the first time.

TO TURN OFF GAS TO APPLIANCE

1. Set wall thermostat to lowest setting. (if applicable)
2. Turn off all electric power to the appliance if service is to be performed.
3. Push in gas control knob slightly and turn clockwise  to "Off". Do not force.

OPERATING

Once a pilot light has been established, the unit may be operated one of two ways:



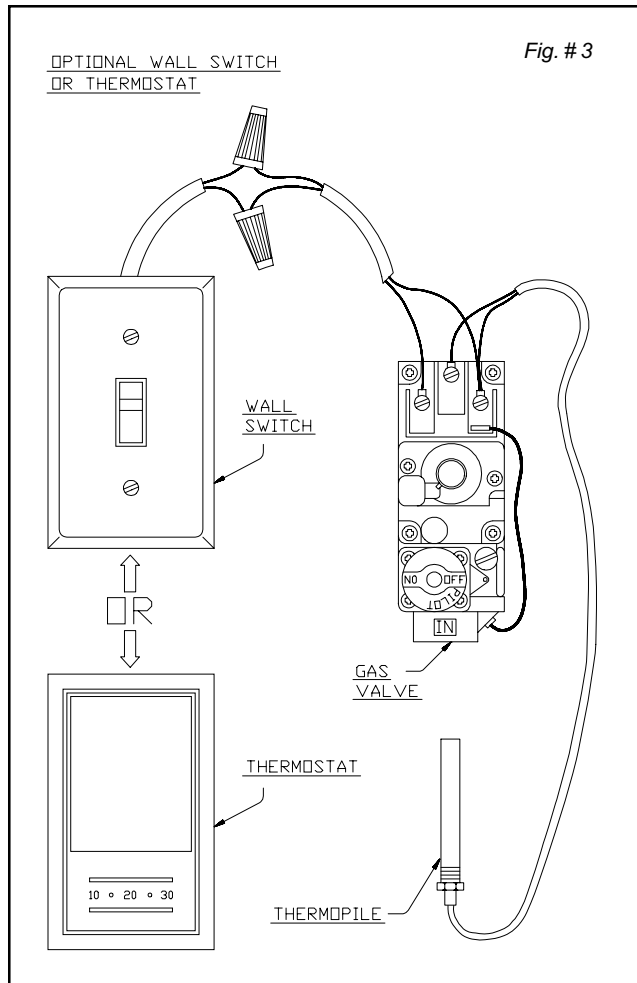
Manual:

- 1) Turn burner control dial to desired setting. (Set to Hi, Med, or Low only - do not operate in between settings. See Fig. #2) To turn unit off, turn burner control dial to "OFF" position.

Remote:

Optional wall switch or wall thermostat is required. (Fig. #3)

- 1) Turn burner control dial to desired setting. (Set to Hi, Med, or Low only - do not operate in between settings. See Fig. #2.) The unit may be turned on or off via wall switch, or automatically by the wall thermostat.



Extend Shutdown:

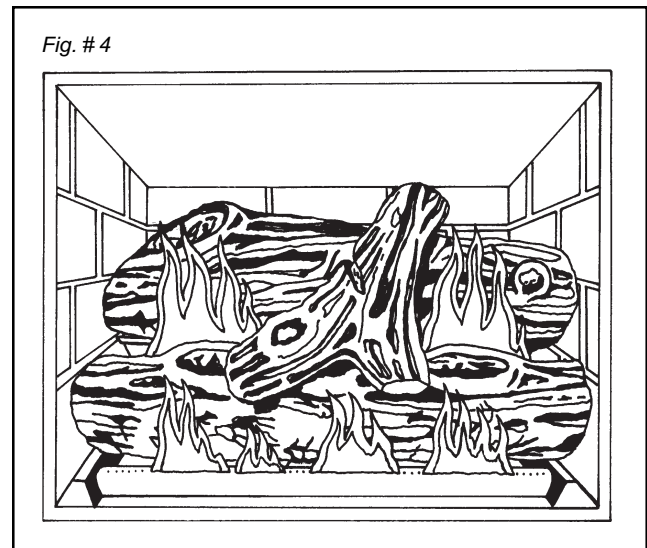
- 1) Partially depress and turn gas control dial clockwise past "PILOT" to "OFF" position.

To re-light unit, see "lighting instructions" section.

Note: When lit for the first time, the appliance will emit a slight odour for a couple of hours. This is due to the curing of paints, sealants and lubricants in the manufacturing process. This condition is temporary. Open doors and windows to ventilate area.

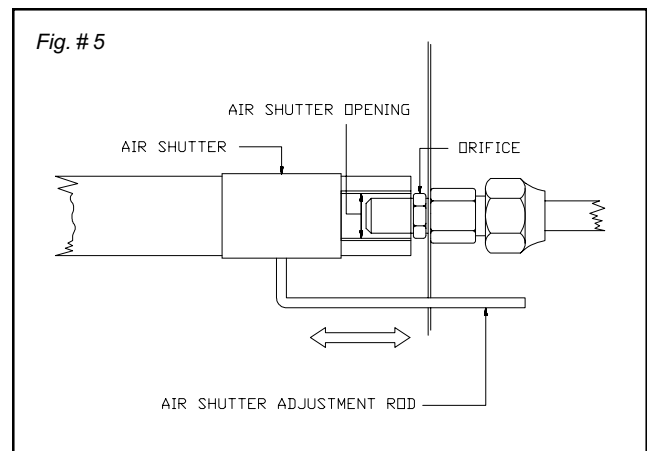
GAS FLAME ADJUSTMENT

The air shutter on the burner venturi tube controls the primary combustion air to the gas burner. Although it is preset at the factory, some adjustment may be necessary to obtain desired flame and to eliminate carbon deposits. (See Fig. #4 for proper flame pattern)



To Adjust: (See Fig. #5)

- 1) Loosen retaining screws and open left side panel to expose controls
- 2) Move air shutter adjustment rod in or out until proper flame is achieved.
- 3) Close control side panel.



Caution: Proper air shutter setting is a must. The flame should be just orange and "lazy". It should NEVER be set to create sooting on internal parts and glass. Open air shutter gradually until sooting stops.

GAS SUPPLY

The Mirage Gas Appliance comes equipped with a flexible 3/8" N.P.T. Male inlet for easy gas connection. This connector is located behind the left side panel.

Correct gas pressure requirement:

	Natural Gas
Min. Pressure (For purpose of input adjustment)	5.0" wc
Max Pressure	10.5" wc
Manifold Pressure	3.5" wc

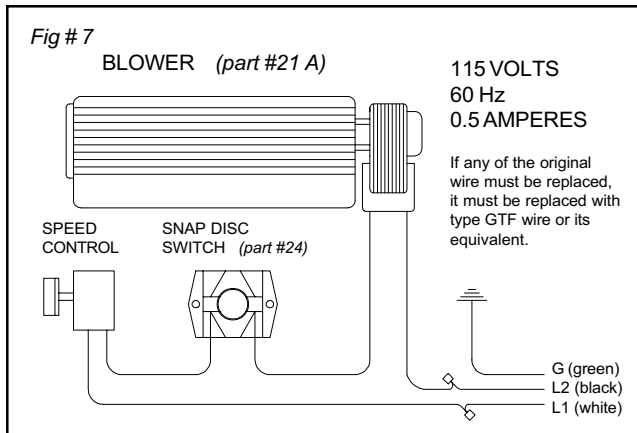
Proper gas line diameter must be used to assure proper operation. A pressure test port (1/8 inch N.P.T. plugged tapping) must be provided for checking gas pressure. This port must be located immediately upstream of the gas supply connection to the appliance.

ELECTRICAL

No electrical connection is required for the gas system operation. The self generating pilot provides current for the optional remote wall switch or wall thermostat. (See fig. # 4 for proper installation.)

Circulating air blower electrical rating: 115V, 60HZ, 80 watts. (See Fig. #7 for blower wiring diagram) For your protection against shock hazard, use only a properly grounded outlet that will accept a three-pronged plug. Do not cut or remove the grounding prong.

Consult local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code and in the USA with the National Electrical Code, ANSI/NFPA 70 (Latest Edition)



BLOWER OPERATION

The circulating air blower is thermostatically controlled and will not operate if appliance is cold. A few minutes after the appliance is lit and the variable speed control set at a desired setting, the blower will automatically turn on. The blower will automatically turn off a few minutes after the appliance is shut down.

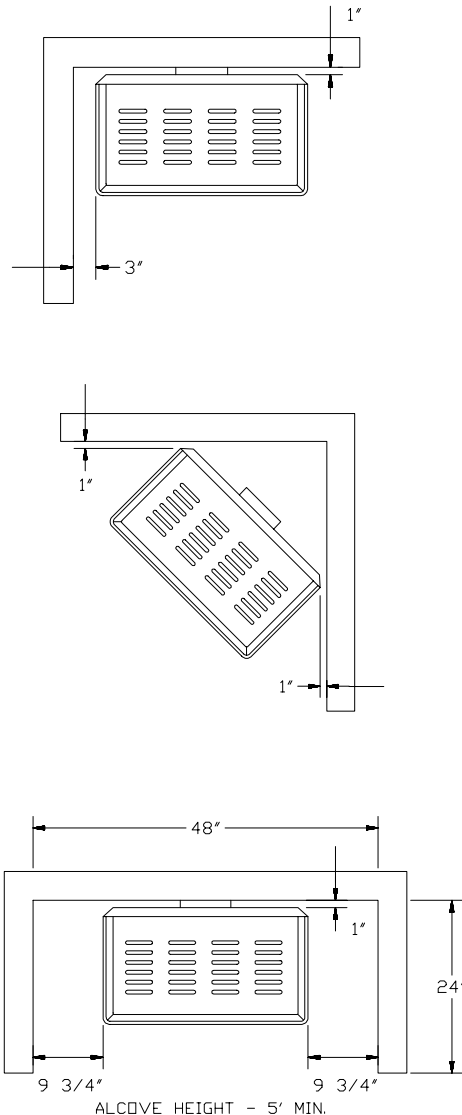
CLEARANCES

The minimum clearances from the appliance to combustibles are shown on Fig. #8. For purpose of servicing, a 12" right side (side with controls) clearance is recommended. Adequate clearances around air openings and combustion air supply are required.

Minimum Clearance to Combustibles

Fig. # 8

Sidewall to Appliance	3 in. (76 mm)
Rearwall to Appliance	1 in. (25 mm)
Corner to Appliance	1 in. (25 mm)



INSTALLATION PRECAUTIONS

The Mirage Gas Appliance installation and venting must conform to the current CAN/CGA-B149 installation code (in Canada) or the current National Fuel Gas Code, ANSI Z223.1 (in the USA), and approved per local codes. Only qualified (licensed or trained) personnel should install this product.

For Mobile Housing installation, the installation must conform to the current CSA Z240.4 installation code (in Canada) or the Standard for Manufactured Home Installations, A225.1/NFPA 501A. (in the U.S.A.), and approved per local codes. Only qualified (licensed or trained) personnel should install this product.

VENT SYSTEM

Before starting installation of vent kits, the installer should read these instructions to insure that the proper vent system has been selected for the installation.

Vent systems approved for use with the Mirage Direct Vent are shown in Figure 8. Approved vent systems components are labelled for identification. **NO OTHER VENTING SYSTEMS OR COMPONENTS MAY BE USED.**

Connections between each vent system component must be tightly joined and sealed, and secured with sheetmetal screws at each joint.

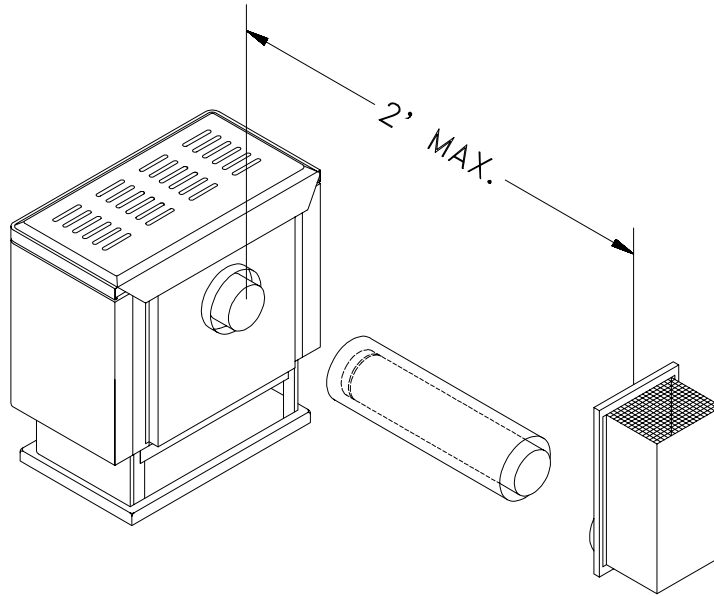
Consult your local Building Codes before beginning the installation.

CAUTION: UNDER NO CONDITION SHOULD COMBUSTIBLE MATERIAL BE CLOSER THAN 1-INCH FROM THE VERTICAL AND HORIZONTAL SECTIONS OF THIS VENT SYSTEM.

Fig # 8

PART #	PART DESCRIPTION	
RVT	RISER VENT TERMINAL	
SK 12	12" STARTER PIPE	
SK 24	24" STARTER PIPE	
WTS	WALL THIMBLE SPACER	
TCS	TRIM COLLAR (SQUARE)	
LB 45	45° COAXIAL ELBOW	
LB 90	90° COAXIAL ELBOW (2)	
WSS	WALL SUPPORT SPACER	
CP 24	24" COAXIAL PIPE	
CP 48	48" COAXIAL PIPE	

Fig. #9



STRAIGHT THROUGH WALL

- 1) Determine the exact position of the gas stove so that the direct vent pipe is centered (if possible) between two building framing members. This will avoid any extra framing.
- 2) Carefully measure up 23-inches from the finished floor and mark the center of a 9-inch square or round hole. (See Figure #10)

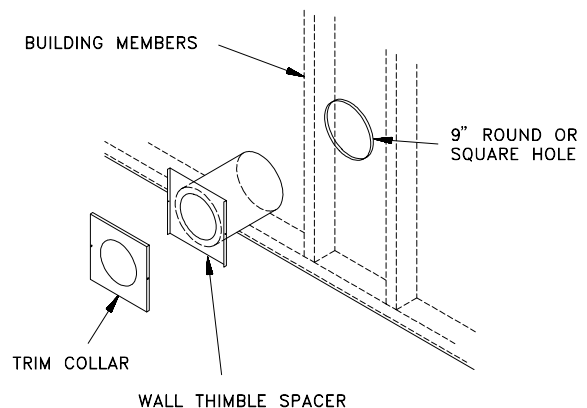
IMPORTANT: When locating this hole it should be noted that the bottom of the vent terminal must be a **MINIMUM** of 12-inches above grade, the top of the terminal must be a **MINIMUM** of 24-inches below combustible material such as a deck or roof overhang and the side of the terminal must be a **MINIMUM** of 12-inches away from an adjacent wall. (See Figure 15)

- 3) Cut a 9-inch square or round hole through the exterior wall of the building.
- 4) Position the wall thimble spacer (WTS) from the inside through the 9-inch hole. (Figure 10). For walls less than 11-inches thick, the thimble must be trimmed back flush with the exterior wall.
- 5) Attach the trim collar to the flanges of the wall thimble with the screws provided.
- 6) The coaxial starter pipe (SK 12) may have to be cut to length depending on the wall thickness and/or rear clearance of the stove. Measure the wall thickness from the finished trim collar surface to the exterior mounting surface for the vent terminal. Add 1/4-inches plus rear clearance to the wall thickness (i.e. rear clearance of 1", add 1 1/4", rear clearance of 3", add 3 1/4" to wall thickness).
- 7) Cut both pipes to this length. Do not cut off the crimp-bead off the 5-inch inner pipe.
- 8) The vent pipe must be attached to the collars of the gas stove with the bead end towards the appliance. Slide the inner 5-inch flue pipe over

top of the collar up to the crimp-bead and attach with three sheetmetal screws. Seal the joint with high temperature silicone. Next, slide the 7-inch outer pipe over the 5-inch pipe fully and secure to the pipe collar with three sheetmetal screws. Assure that the vent pipe is level.

- 9) Slide the appliance into place, with vent pipe centered in wall pass-through. When the unit is properly installed, the 7-inch vent pipe will project 3/4-inch past the outside wall surface and the 5-inch inner pipe will extend 1-inch past that. The coaxial vent pipe must be level.
- 10) Install vent terminal according to section **VENT TERMINAL INSTALLATION**

Fig. #10

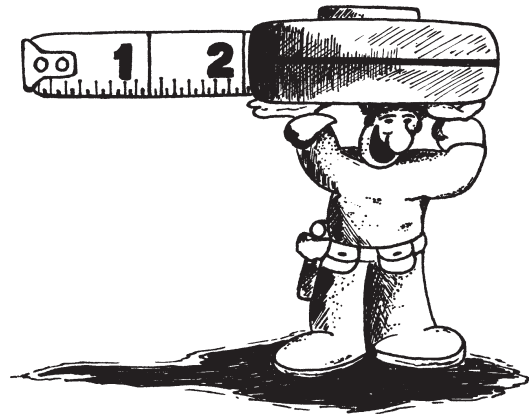


CORNER INSTALLATION

- 1) Determine the exact position of the gas stove, making sure the unit will be set at 45° to the walls and the corner clearance will not be less than 1-inch. The vent pipe should be centered (if possible) between two building members. This will avoid any extra framing.
- 2) Once the desired location is found, carefully measure up 23-inches from the finished floor and make a mark. Next, measure 7-inches plus the actual corner clearance of the appliance over from the corner of the room and make a mark. (i.e. corner clearance of 1", measure 8"; corner clearance of 3", measure 10")

IMPORTANT: When locating this hole it should be noted that the bottom of the vent terminal must be a **MINIMUM** of 12-inches above grade, the top of the terminal must be a **MINIMUM** of 24-inches below combustible material such as a deck or roof overhang and the side of the terminal must be a **MINIMUM** of 12-inches away from an adjacent wall. (See Figure 15)

- 3) Cut a 9-inch square or round hole through the exterior wall of the building.
- 4) Position the wall thimble spacer (WTS) from the inside through the 9-inch hole. (Figure 10). For walls less than 11-inches thick, the thimble must be trimmed back flush with the exterior wall.
- 5) Attach the trim collar to the flanges of the wall thimble with the screws provided.
- 6) Attach the coaxial 45° elbow (LB 45) to the unit. Slide the 5-inch inner elbow pipe 1-inch over top of the collar and secure with three sheetmetal screws. Seal the joint with high temperature silicone. Next, slide the outer elbow pipe over the smaller elbow and secure to the pipe collar with three sheetmetal screws.
- 7) The coaxial starter pipe (SK 12) may have to be cut to length depending on the wall thickness and/or corner clearance of the stove. Measure the wall thickness from the finished trim collar surface to the exterior mounting surface for the vent terminal. Add 3 3/4-inches plus corner clearance to the wall thickness. (i.e. corner clearance of 1", add 4 3/4", corner clearance of 3", add 6 3/4" to wall thickness)



- 8) Cut both pipes to this length.
- 9) Slide the inner 5-inch flue pipe over top of the crimped end of elbow and attach with three sheetmetal screws. Seal the joint with high temperature silicone. Next, slide the 7-inch outer elbow pipe over the 5-inch elbow fully and secure to the elbow with three sheetmetal screws. Assure that the vent pipe is level.
- 10) Slide the appliance into place making sure vent pipe is centered in wall pass-through. When the unit is properly installed, the 7-inch vent pipe will project 3/4-inch past the outside wall surface and the 5-inch inner pipe will extend 1-inch past that.
- 11) Install vent terminal according to section **VENT TERMINAL INSTALLATION**

Fig. # 11

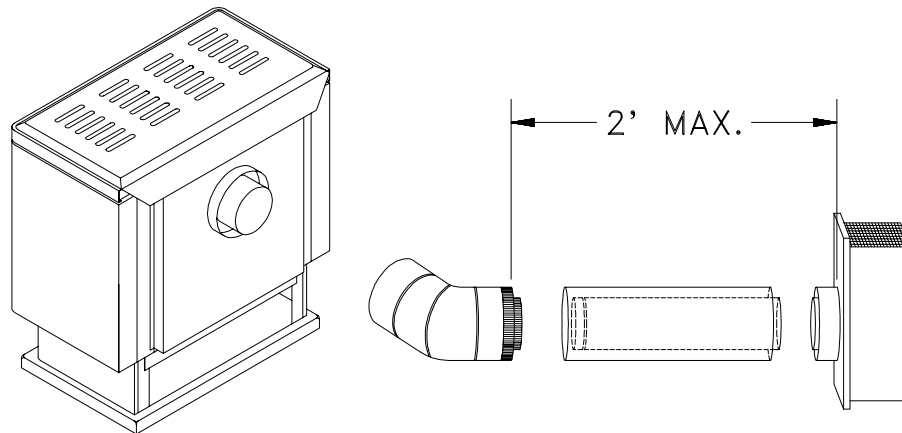
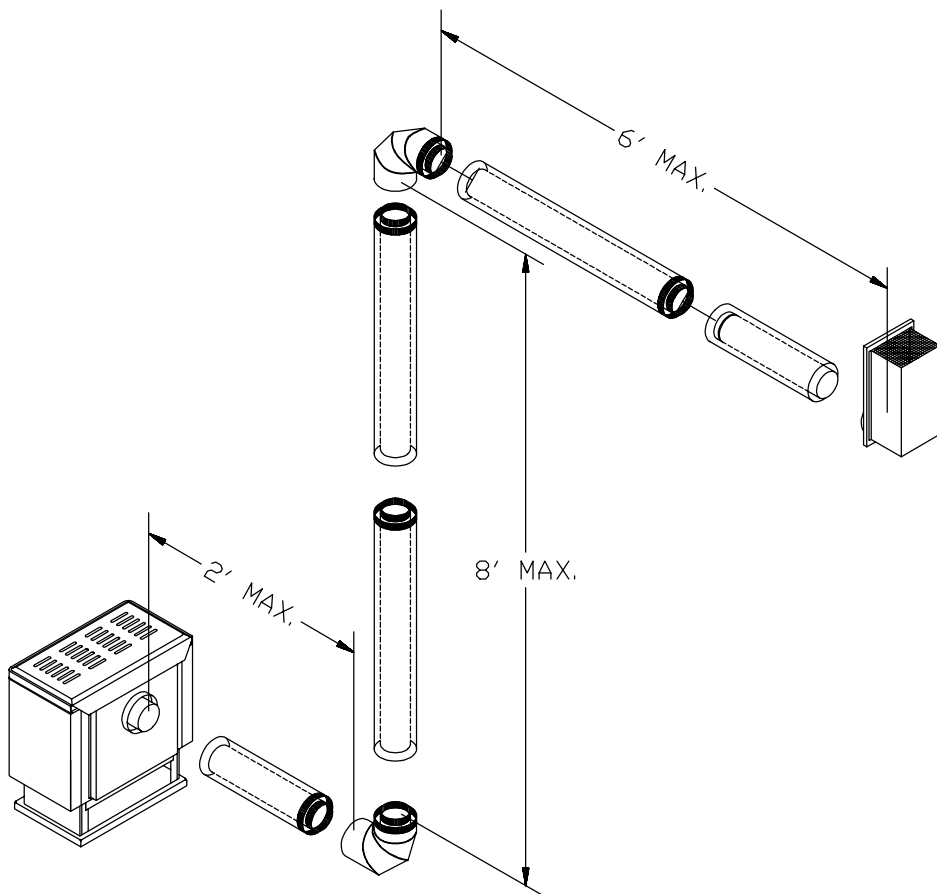
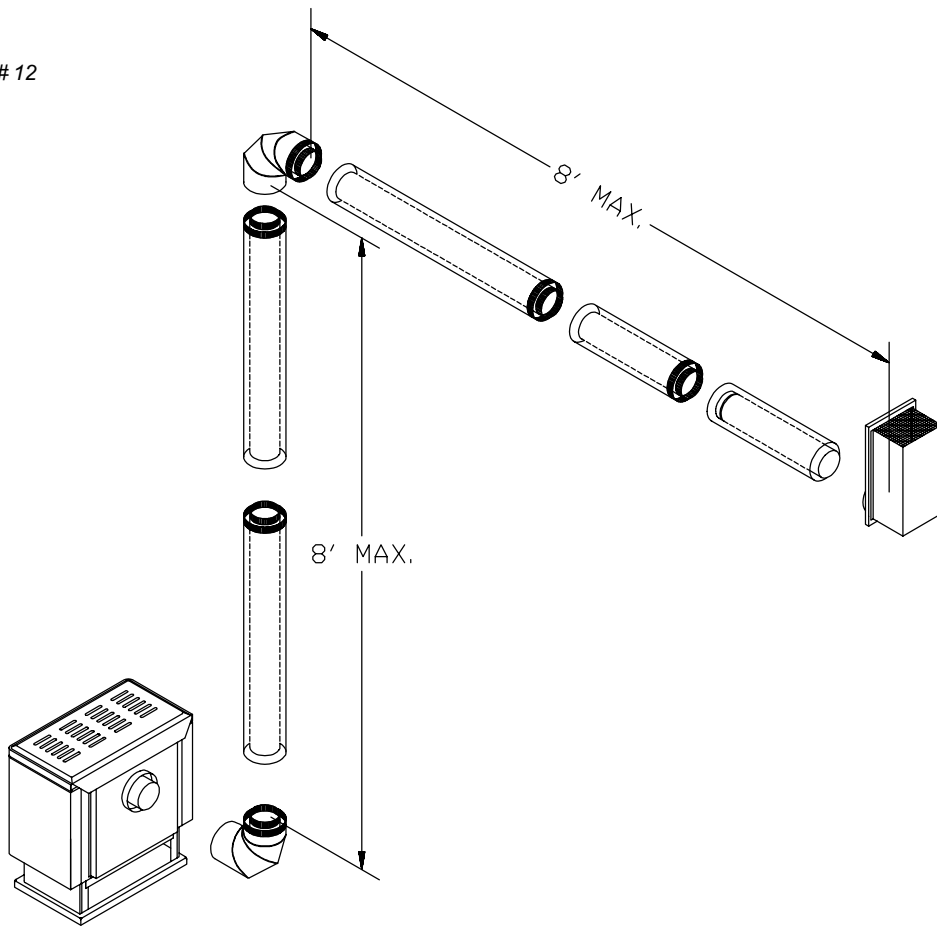


Fig. # 12



BASEMENT INSTALLATION

- 1) In planning a basement installation it is necessary to determine the exact position of the gas stove, the location of the vent terminal and the length of vent pipe to be used. Various combinations of vertical and horizontal vent pipe may be employed. Always plan your installation to minimize extra framing. The breeching through the exterior wall should be centered (if possible) between two building members.

IMPORTANT: When locating this hole it should be noted that the bottom of the vent terminal must be a MINIMUM of 12-inches above grade, the top of the terminal must be a MINIMUM of 24-inches below combustible material such as a deck or roof overhang and the side of the terminal must be a MINIMUM of 12-inches away from an adjacent wall. (See Figure 15)

- 2) Attach the coaxial vent pipe or 90° elbow with crimped end away from unit. All joints and seams in the vent system should be sealed with high temperature silicone.
- 3) Continue adding vent components per the pre-planned system configuration. Support spacer must be used for each 6-feet of vertical and horizontal run. The spacers are placed around the pipe and nailed or screwed to the framing members. Maintain a minimum 1-inch clearance to combustibles.

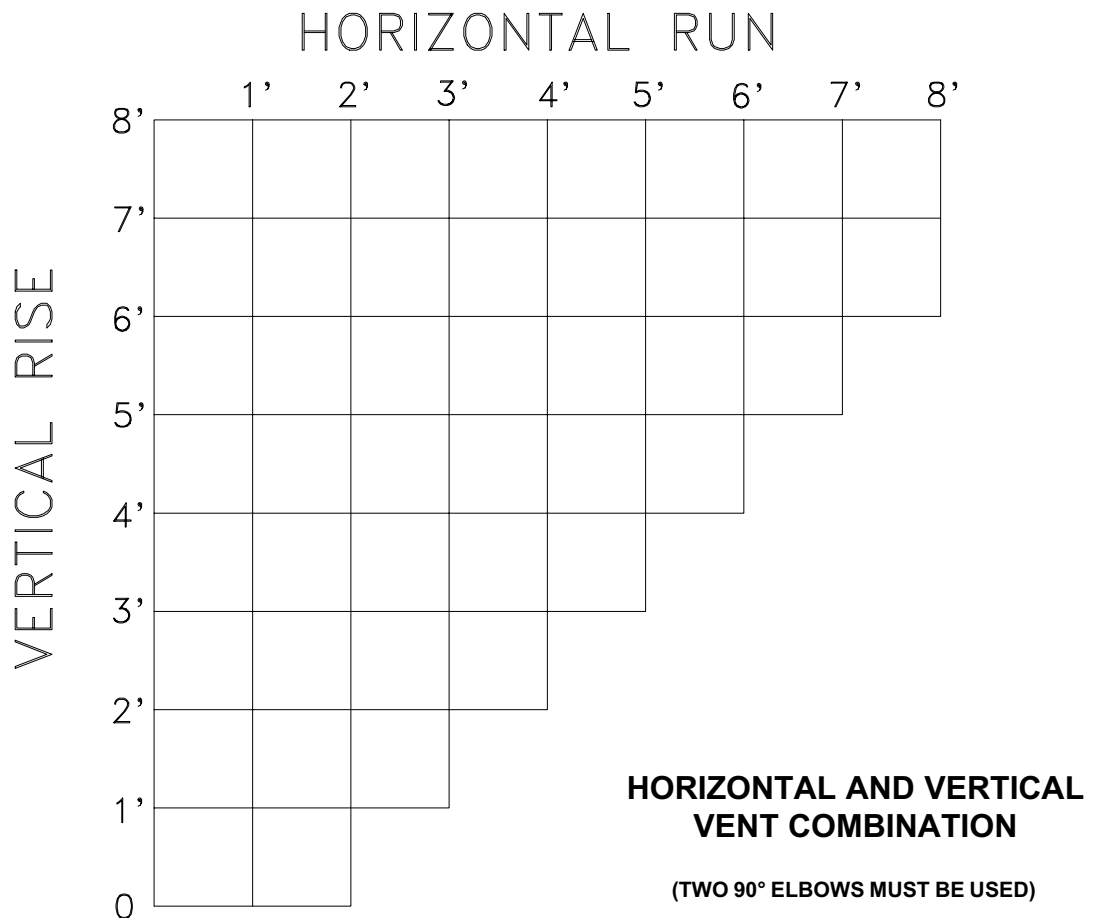
- 4) The starter pipe (SK 12 or SK 24) must be the last section in the vent system. The pipe may have to be cut to length depending on the wall thickness and/or position of vent system. Cut both pipes to the same length. Do not cut off the crimp-bead off the 5-inch inner pipe.
- 5) When the unit and venting is properly installed, the 7-inch vent pipe will project 3/4-inch past the outside wall surface and the 5-inch inner pipe will extend 1-inch past that.
- 6) Install vent terminal according to section **VENT TERMINAL INSTALLATION**

WARNING: MAKE CERTAIN THAT THE ELBOW ASSEMBLY OR STRAIGHT PIPE SECTION IS PUSHED ALL THE WAY ONTO THE STARTING COLLARS AND IS SECURELY FASTENED.

FLOOR PROTECTION

The Mirage direct vent appliance may be installed on a combustible floor. If the appliance is to be installed on flooring that may make the unit unstable, the appliance must be fastened to the structure or installed on a metal or wood panel extending the full depth and width of the unit.

Fig. # 13



VENT TERMINAL INSTALLATION

- 1) Install the vent terminal on the outside wall. When placing the vent terminal, make sure the collars on the terminal inserts into the corresponding vent pipe.
- 2) Attach terminal to the wall with screws at each corner. (see Fig. #14)

NOTE: THE VENT TERMINAL MUST BE POSITIONED SO THAT THE FLUE OUTLET IS POINTING UP.

- 3) Caulk in place to prevent any moisture entering the structure.

MINIMUM CLEARANCES TO THE VENT TERMINAL MUST BE MAINTAINED. (SEE FIG. # 15)

NOTE: LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.

Fig. # 14

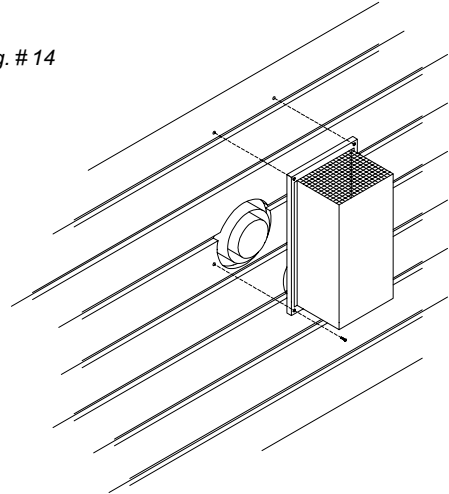
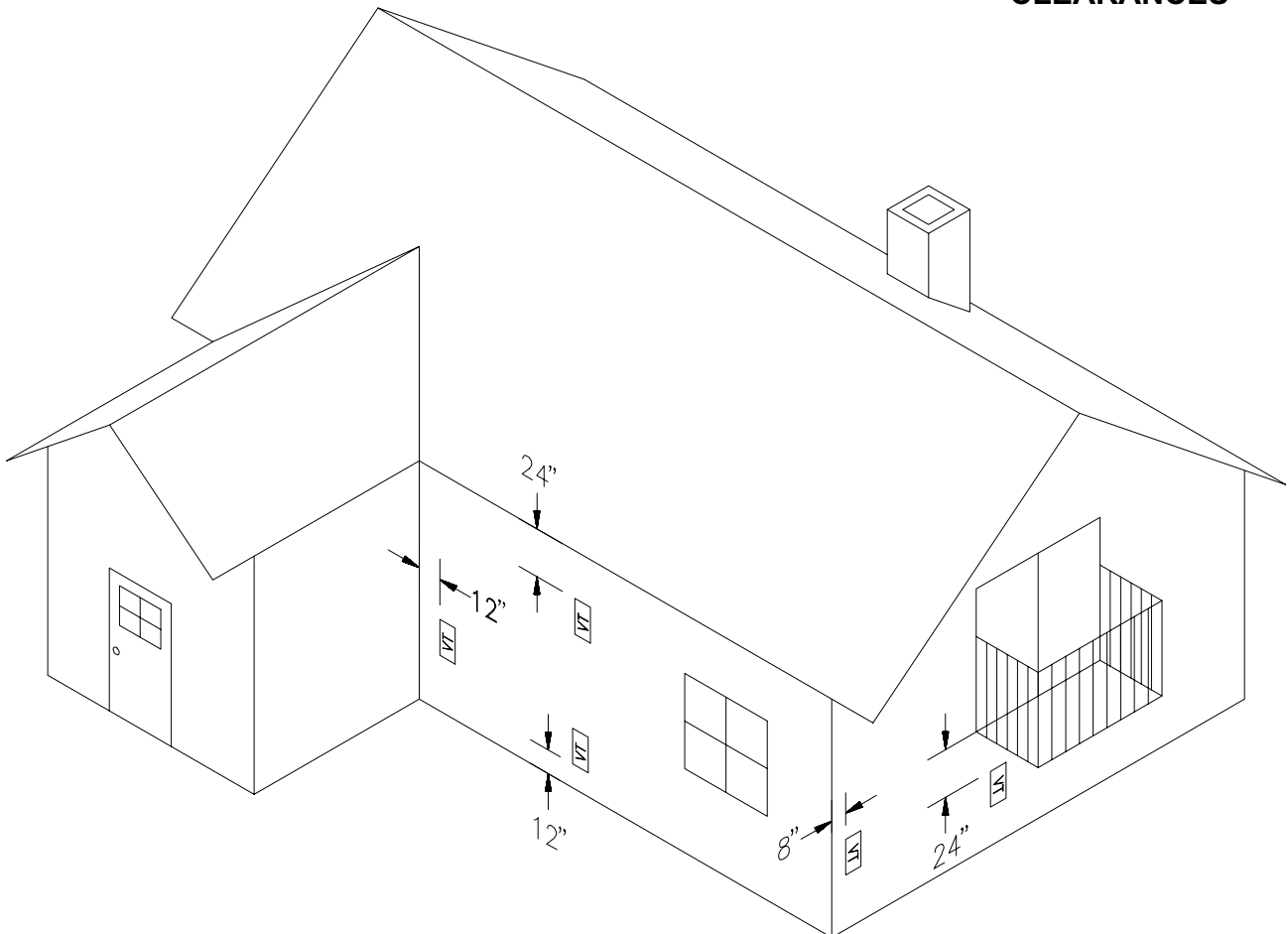


Fig # 15

VENT TERMINAL MINIMUM CLEARANCES

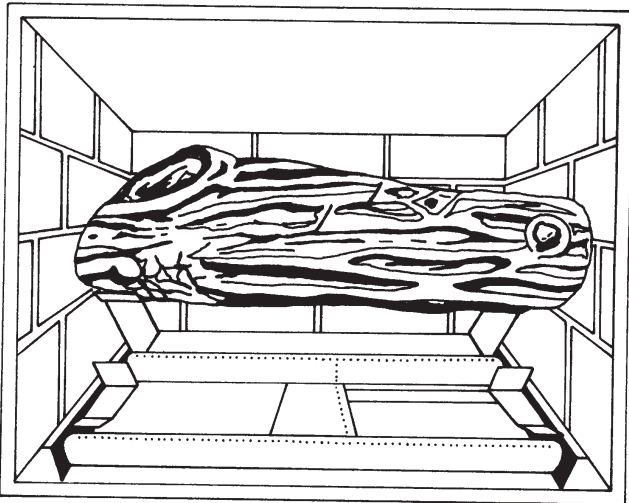


LOG SET

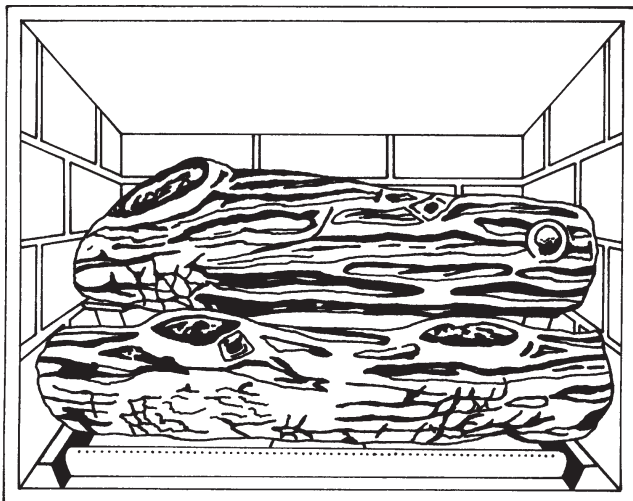
The log set comes installed in the appliance from the factory. If the logs have to be removed for cleaning, they must be handled carefully as they are very fragile. To re-install the log set, follow this procedure:

- 1) Place the back log on the rear tabs of the burner assembly, with flat side facing rear and bark side forward.
- 2) Place the front log on the tabs located at the front of the burner. The log is notched to fit over top of the pilot.
- 3) The top "Y" log bridges across from the front log to the rear log. The log should be properly seated in the relief of the front and rear log.

Step 1 Back Log Placement



Step 2 Front Log Placement



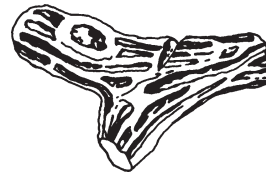
Back Log



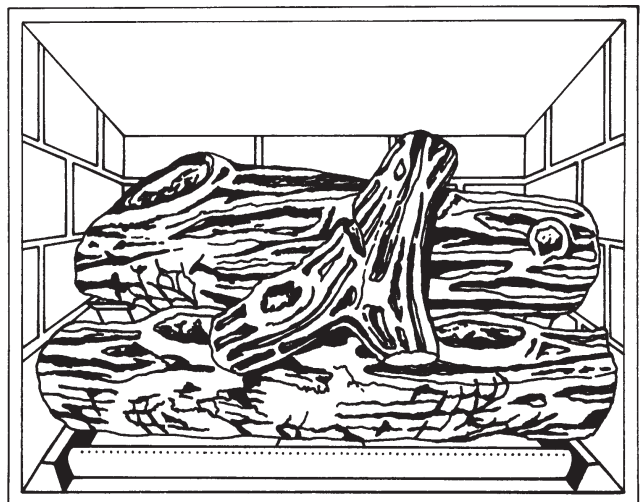
Front Log



Top Log



Step 3 Top Log Placement



Note: Improper placement of logs may cause sooting on internal parts and glass.

REPLACEMENT PARTS

Fig. # 17 and 18

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

DESCRIPTION	PART NO.	DESCRIPTION	PART NO.
DV MAIN BODY	1 A	IGNITER KNOB	30
TOP PANEL	2	GAS CONTROL VALVE - NAT. GAS	31
LEFT SIDE PANEL	3	DV BURNER CONTROL VALVE - NAT. GAS	33 A
DV CONTROL SIDE PANEL	4 A	GAS CONTROL KNOB	35
DV CONTROL DOOR	5 A	GAS CONTROL KNOB EXTENSION	36
PEDESTAL COVER	6	BURNER CONTROL KNOB	37
'MIRAGE' LOGO (<i>not shown</i>)	7	CONNECTOR FITTING	38
TOP LOUVER	8	FLEX INLET PIPE (<i>not shown</i>)	39 A
BOTTOM LOUVER	9	DV BURNER SUPPLY TUBE	40 A
DV FRONT TRIM	10 A	ORIFICE CONNECTOR FITTING	41
DV GLASS FRAME	11	ORIFICE - DV	42 A
GLASS PANEL	12	DV VENTURI TUBE	44 A
DV GLASS GASKET KIT (<i>not shown</i>)	14 A	VENTURI GASKET	45
DV LOG SET COMPLETE (#17 A, 19 A, & 20 A)	16 A	DV BURNER ASSEMBLY	46 A
DV FRONT LOG (<i>see fig. #16</i>)	17 A	PILOT ASSEMBLY - NAT. GAS	47
DV BACK LOG (<i>see fig. #16</i>)	19 A	PILOT ORIFICE - NAT. GAS	49
DV TOP LOG (<i>see fig. #16</i>)	20 A	THERMOPILE	51
DV REPLACEMENT BLOWER (<i>see fig. #7</i>)	21 A	PILOT SUPPLY TUBE	52
RHEOSTAT C/W RETAINING NUT	22	BUSHING	53
RHEOSTAT KNOB	23	WIRE STRAIN RELIEF (<i>not shown</i>)	54
SNAP DISC SWITCH (<i>see fig. #7</i>)	24	CONTROL BRACKET	56
BLOWER WIRING HARNESS (<i>not shown</i>)	25	1/4 SPACER	58
CORD (<i>not shown</i>)	26	CONTROL PANEL BRACKET	59
CORD STRAIN RELIEF (<i>not shown</i>)	27	3/8 SPACER	60
CONTROL PANEL	28 A	PEDESTAL	62 A
ROTARY IGNITER	29	PEDESTAL BASE	64

All parts may be ordered from your nearest Pacific Energy Gas Stove dealer. Contact Pacific Energy for the location of the dealer nearest you.

Fig. # 17

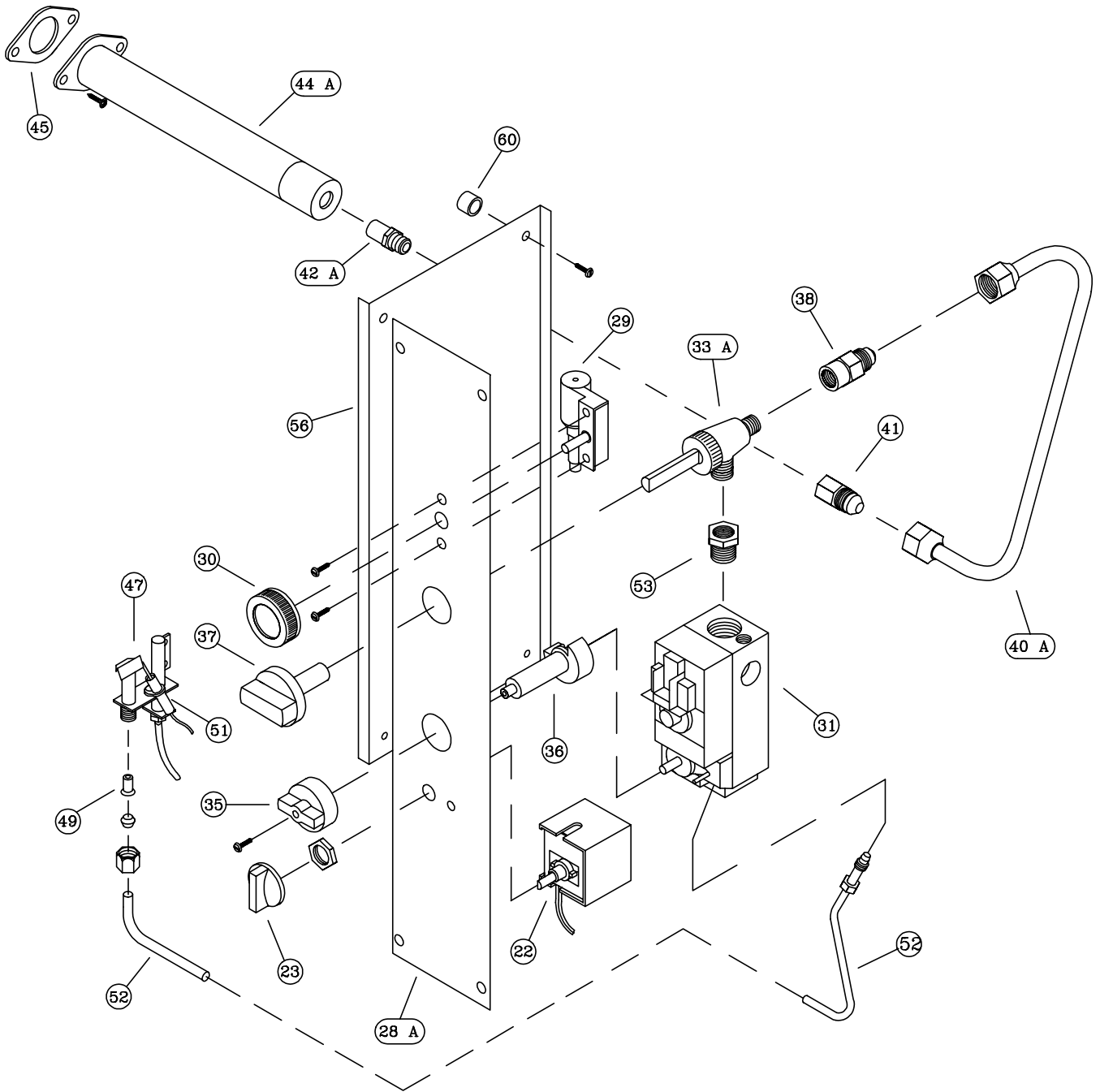
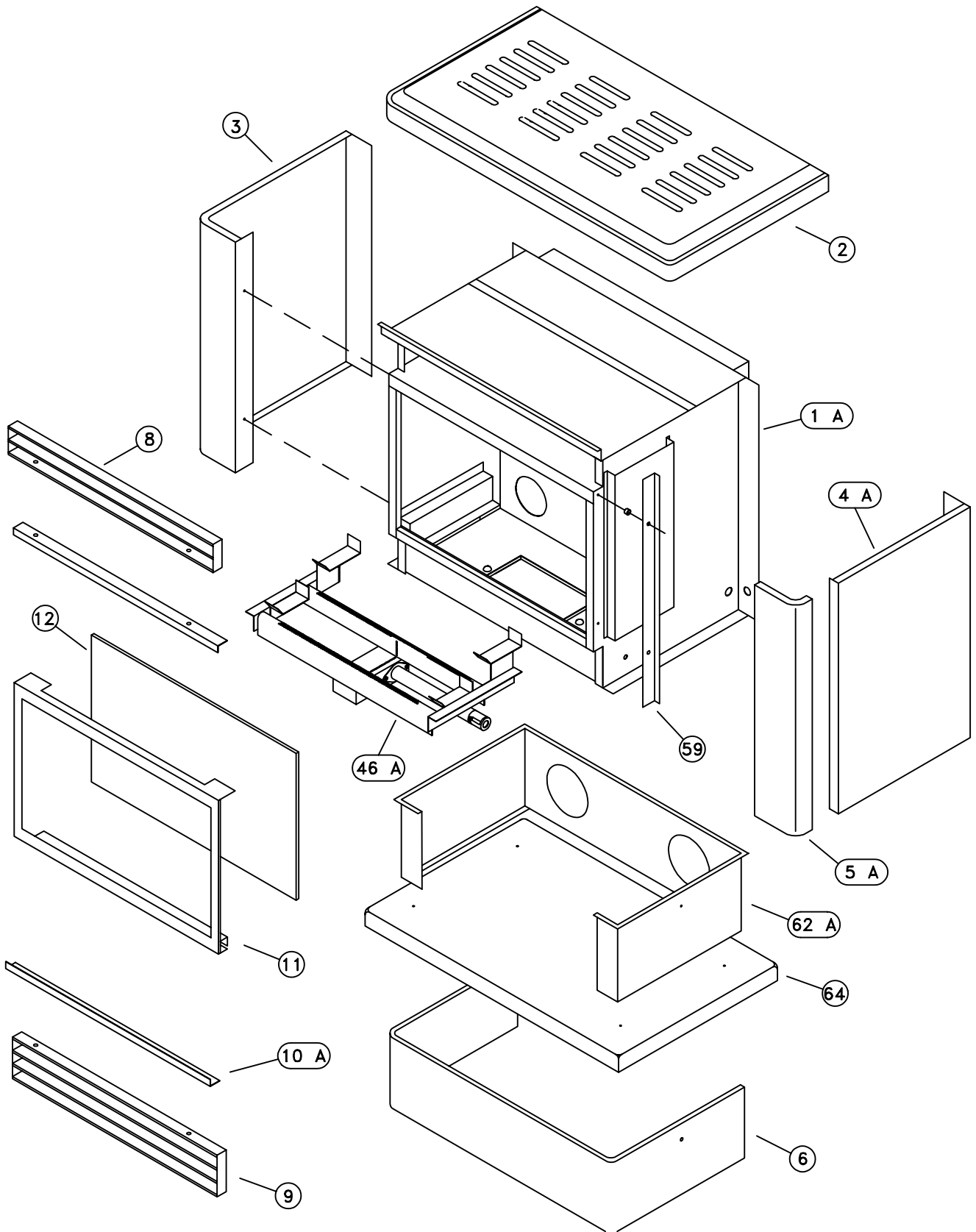
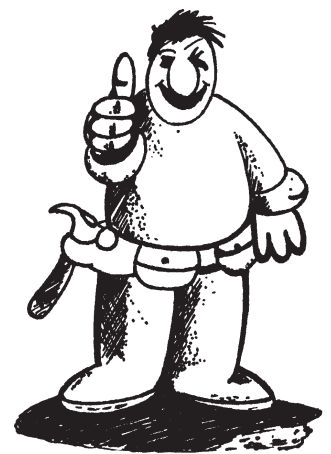


Fig. # 18



-NOTES-



**Pacific Energy Gas Stoves
Box 29, 1394 Fisher Road
Cobble Hill, B.C. V0R 1L0**

When you've looked at all the others.