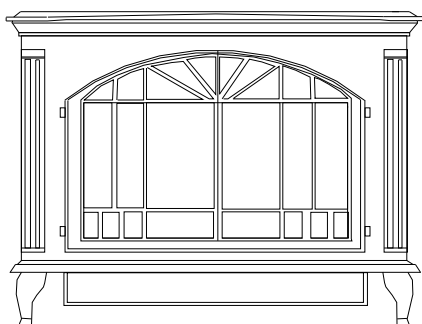


CAST STOVE SERIES

(VENT-FREE) NATURAL OR L.P. (LIQUID PROPANE) GAS STOVE HEATER
OWNER'S OPERATION AND INSTALLATION MANUAL



**“This appliance is intended for supplemental heating.”
“This heater shall not be installed in a bedroom or bathroom.”**

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.

WARNING: The MA series vent-free gas log heater is only approved for use in the CVF(*) series cast iron stove models.

(*) *Indicates Color Suffix Designation*

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 is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on page 3 of this manual.

This appliance may be installed in an aftermarket*, permanently located, manufactured (mobile) home, where not prohibited by state or local codes.

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.

* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

NEW BUCK CORPORATION
P.O. BOX 69
8000 HWY. 226 SOUTH
SPRUCE PINE N.C. 28777

Revised 03/2003

WARNING: Only New Buck Corporation approved blower assembly, part number MA CVF714, may be used with the Townsend II unit only.

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IDENTIFICATION NUMBERS AND DESCRIPTIONS FOR CAST STOVE SERIES

HEPPLEWHITE CAST UNIT:

<u>ID #</u>	<u>DESCRIPTION</u>
CVF100A	ALMOND
CVF100B	BLACK
CVF100BP	CAST (BLACK PAINT)
CVF100G	GREEN
CVF100GP	CAST (GREEN PAINT)
CVF100R	RED

TOWNSEND II CAST UNIT

<u>ID#</u>	<u>DESCRIPTION</u>
CVF200A	ALMOND
CVF200B	BLACK
CVF200BP	CAST (BLACK PAINT)
CVF200G	GREEN
CVF200GP	CAST (GREEN PAINT)
CVF200R	RED

BURNER BASE UNITS FOR HEPPLEWHITE CAST UNIT ONLY:

<u>ID#</u>	<u>DESCRIPTION</u>
MA C100BATLP	LIQUID PROPANE
MA C100BATNAT	NATURAL

BURNER BASE (VENTLESS FIREBOX) UNITS FOR TOWNSEND II ONLY:

<u>ID#</u>	<u>DESCRIPTION</u>
CVFB200LP	LIQUID PROPANE
CVFB200NAT	NATURAL

OPTIONAL BLOWER ASSEMBLY FOR (VENTLESS FIREBOX) TOWNSEND II ONLY:

<u>ID#</u>	<u>DESCRIPTION</u>
MA CVF714	BLOWER ASSEMBLY

VENT-FREE NATURAL OR L.P GAS STOVE HEATER

SAFETY INFORMATION

WARNINGS

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this heater. Improper use of this heater can cause serious injury or death from burns, fire, explosion, electrical shock, and carbon monoxide poisoning.

DANGER: Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the heater may not be working properly. **Get fresh air at once!** Have heater 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.

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

WARNING: Any change to this heater or its controls can be dangerous.

WARNING: Do not allow fans to blow directly into the stove. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

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

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 heater.

Stove becomes very hot when running heater. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Stove will remain hot for a time after shutdown. Allow surfaces to cool before touching.

Carefully supervise young children when they are in the room with heater. When using the handheld remote accessory, keep selector switch in the OFF position to prevent children from turning on burners with remote.

Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

1. 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.
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. This heater shall not be installed in a bedroom or bathroom.
4. Do not use this stove as a wood burning fireplace. Use only models MA C100BATLP, MA C100BATNAT, MA CVFB200LP, or MA CVFB200NAT series vent-free gas log heater.
5. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting.

6. During initial operation, slight smoking could occur due to heater burning manufacturing residues.
7. To prevent the creation of soot, follow the instructions in "Cleaning and Maintenance", page 19.
8. Before using furniture polish, wax, carpet cleaners, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
9. This heater has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the heater if not enough fresh air is available. See "Air for Combustion and Ventilation", pages 3 through 5. If heater keeps shutting off, see "Troubleshooting", pages 20 through 22.
10. Do not run heater
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
11. Do not use this stove to cook food or burn paper or other objects.
12. Do not use heater if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
13. Do not operate heater if any log is broken.
14. Turn heater off and let cool before servicing. Only a qualified service person should service and repair heater.
15. Operating heater above elevations of 4,500 feet could cause pilot outage.
16. Do not place stove directly on carpeting, vinyl tile, or any combustible material other than wood. The stove must set on a metal or wood panel extending the full width and depth of the appliance.

PRODUCT IDENTIFICATION

MODELS MA C100BATLP, MA C100BATNAT OR MA CVFB200LP, MA CVFB200NAT MILLIVOLT LOG HEATER UNITS WITH CVF100's AND CVF200's CAST STOVE SERIES.

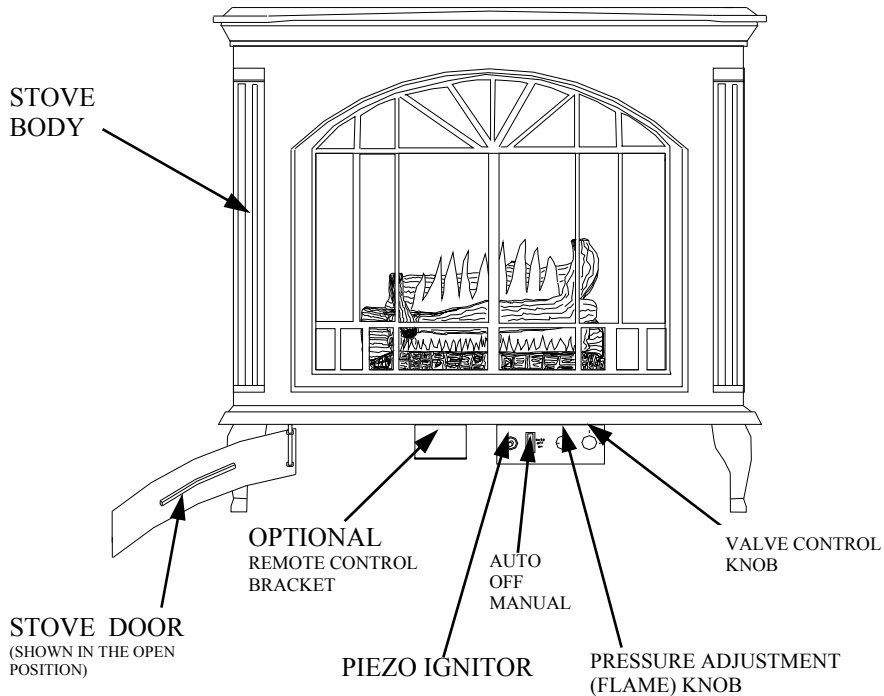


FIGURE 1– TYPICAL STOVE CABINET MODEL

LOCAL CODES

Install and use heater with care. Follow all local codes. In the absence of local codes, use the latest edition of “The National Fuel Gas Code ANSI Z223.1”, also known as NFPA 54*.

*Available from:

American National Standards Institute Inc.
1430 Broadway
New York, NY 10018
National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

PRODUCT FEATURES

OPERATION

This heater is clean burning. It requires no outside venting. There is no heat loss out a vent or up a chimney. Heat is generated by realistic, dancing yellow flames. This heater is designed for vent-free operation. State and local codes in some areas prohibit the use of vent-free heaters.

SAFETY PILOT

This heater has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/pilot is a required feature for vent-free room heaters. The ODS/pilot shuts off the heater if there is not enough fresh air.

PIEZO IGNITION SYSTEM

This heater has a piezo ignitor. This system requires no matches, batteries, or other sources to light heater.

AIR FOR COMBUSTION AND VENTILATION

WARNING: This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to ensure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

Exhaust fans, fireplaces, clothes dryers, and fuel burning appliances draw air from the house to operate. You must provide adequate fresh air for these appliances.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code, NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation*.

All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space
3. Confined Space

The information on pages 4 through 5 will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

- a **Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6×10^{-11} kg per pa-sec- m^2) or less with openings gasketed or sealed and**
- b **Weather stripping has been added on openable windows and doors and**
- c **Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.**

If your home meets all of the three criteria above, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 5.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow For Heater Location*, page 4.

Confined and Unconfined Space

The *National Fuel Gas Code, ANSI Z223.1* defines a **confined space** as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space; and **unconfined space** as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed*, through openings not furnished with doors, are considered a part of the unconfined space.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

*Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

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

WARNING: Any change to this heater or its controls can be dangerous.

AIR FOR COMBUSTION AND VENTILATION

Continued

DETERMINING FRESH-AIR FLOW FOR HEATER LOCATION

Determining if You Have A Confined or Unconfined Space

Use this work sheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install heater plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

1. Determine the volume of the space (length x width x height).

Length x Width x Height = _____ cu. Ft. (volume of space)

Example: Space size 20 ft. (length) x 16 ft. (width) x 8 ft. (ceiling height) = 2560 cu. Ft. (volume of space)
if additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Divide the space volume by 50 cubic feet to determine the maximum Btu/Hr the space can support.

_____ (volume of space) / 50 cu. Ft. = (maximum Btu/Hr the space can support)

Example: 2560 cu. Ft. (volume of space) / 50 cu. Ft. = 51,200 (maximum Btu/Hr the space can support)

3. Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free heater _____ Btu/Hr

Gas water heater* _____ Btu/Hr

Gas furnace _____ Btu/Hr

Vented gas heater _____ Btu/Hr

Gas fireplace logs _____ Btu/Hr

Other gas appliances* + _____ Btu/Hr

Total = _____ Btu/Hr

Example:

Gas water heater 40,000 Btu/Hr

Vent-free heater + 30,000 Btu/Hr

Total = 70,000 Btu/Hr

* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

_____ Btu/Hr (maximum the space can support)

_____ Btu/Hr (actual amount of Btu/Hr used)

Example: 51,200 Btu/Hr (maximum the space can support)

70,000 Btu/Hr (actual amount of Btu/Hr used)

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From Inside Building*, page 5.
- B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors*, page 5.
- C. Install a lower Btu/Hr heater, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

WARNING: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI 223.1, Section 5.3* or applicable local codes. NOTE: ANSI 223.1 is also known as NFPA 54.

AIR FOR COMBUSTION AND VENTILATION

Continued

VENTILATION AIR

VENTILATION AIR FROM INSIDE BUILDING

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings; one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (See Options 1 and 2, Figure 2). You can also remove door into adjoining room (See Option 3, Figure 2). Follow the *National Fuel Gas Code, NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

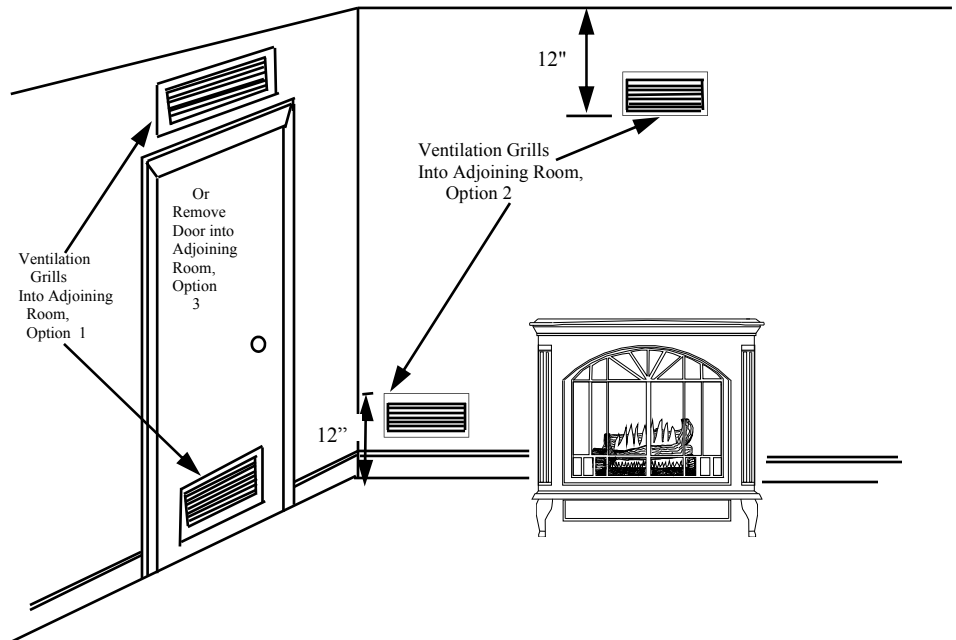


FIGURE 2 - VENTILATION AIR FROM INSIDE BUILDING

WARNING: Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code, NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic, if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

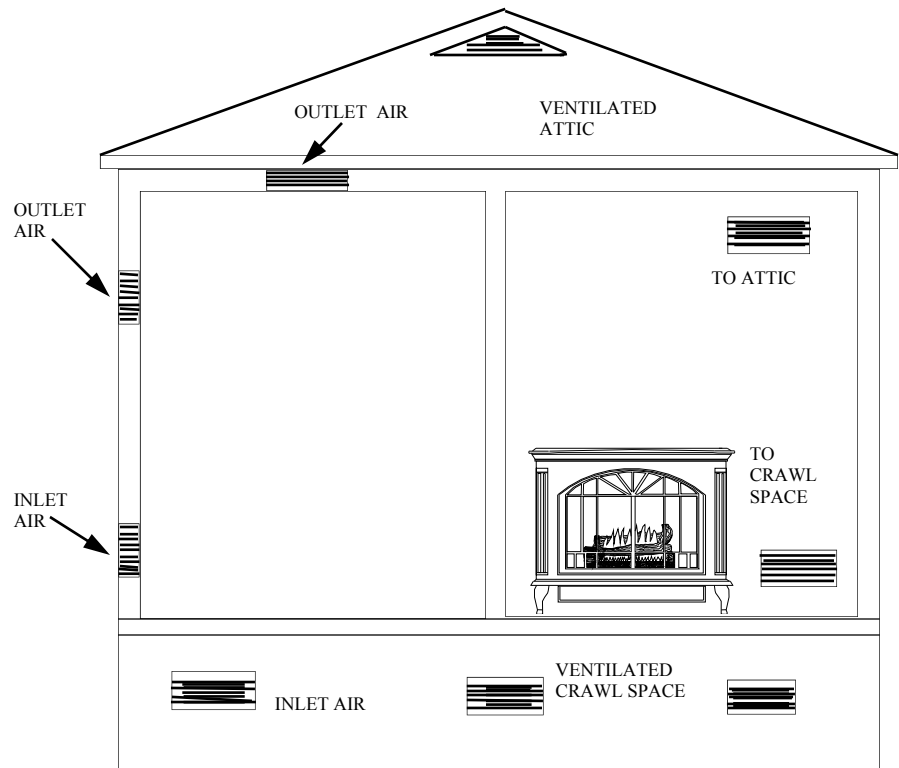


FIGURE 3 - VENTILATION AIR FROM OUTDOORS

INSTALLATION

NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. Do not run ceiling fan while heater is running. In the event of a power outage, you can use this heater as your primary heat source.

WARNING: A qualified service person must install heater. Follow all local codes.

WARNING: Never install the heater

- in a bedroom or bathroom
- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 48 inches from the front, top, or sides of the heater
- in high traffic areas
- in windy or drafty areas

CAUTION: This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls.

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing heater in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, pages 4 through 5.

Maintain adequate clearances for accessibility for the purpose of servicing and proper operation.

GAS CONNECTION

Check gas type. Use only the type of gas indicated on the valve rating plate. If the type of gas listed on the plate is not your type of gas supply, **DO NOT INSTALL**. Contact your dealer for proper model.

Always use an external regulator for all LP heaters to reduce the supply tank pressure to a maximum of 13" W.C. This is in addition to the regulator furnished with the heater.

Warning: Connection directly to an unregulated LP tank can cause an explosion.

The normal gas connection is 3/8" NPT made at the right side facing the log set. If a left side connection is desired, the connecting pipe may be routed under the rear of the burner base to terminate at the right hand side for connection to the inlet of the valve.

NOTE: The connecting pipe must be internally treated for protection from sulfur compounds if copper tubing is used for natural gas. Test for leaks using a solution of soap and water after completing the connection. **DO NOT USE OPEN FLAME.**

CLEARANCES TO COMBUSTIBLES (Vent-Free Operation Only)

WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling, and adjoining side and back walls.

Carefully follow the instructions below. This stove is a freestanding unit designed to set directly on the floor. Do not place stove directly on carpeting, vinyl tile, or any combustible material other than wood. The stove must set on a metal or wood panel extending the full width and depth of the appliance.

IMPORTANT: You must maintain minimum wall and ceiling clearances during installation. The minimum clearances are shown in Figure 4. Measure from outermost point of stove top.

Minimum Wall and Ceiling Clearances (See Figure 4)

- A. Clearances from outermost point of stove top to any combustible side wall should not be less than 4 inches.
- B. Clearances from outermost point of stove top to any combustible back wall should not be less than 4 inches (Includes Corner Installations).
- C. Clearances from the stove top to the ceiling should not be less than 48 inches.

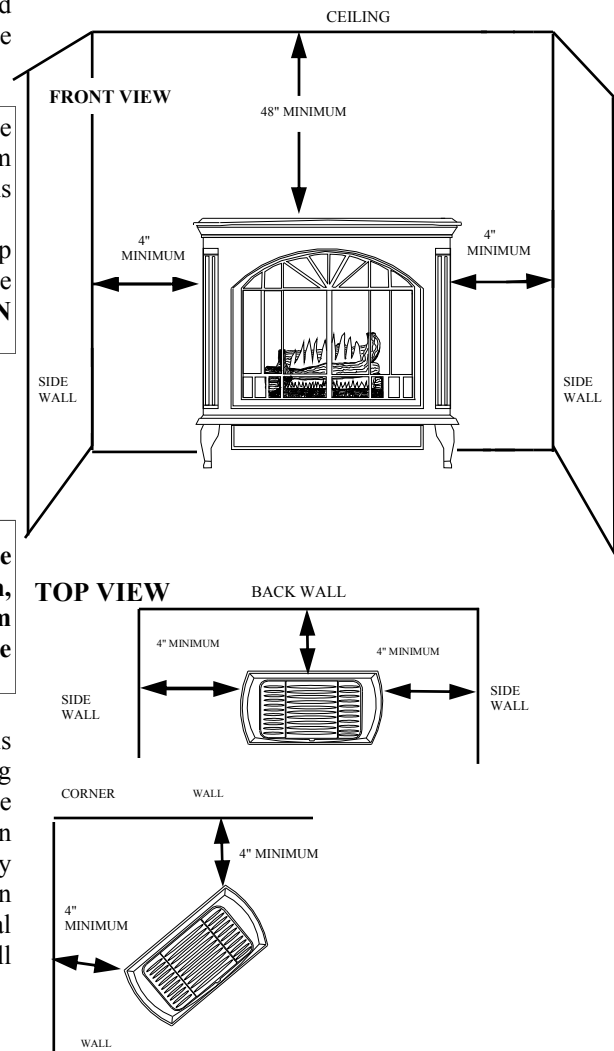


FIGURE 4 - MINIMUM CLEARANCES TO WALLS AND CEILING

INSTALLATION

Continued

STOVE CAVITY ASSEMBLY

1. Lift off corrugated box enclosing stove body crating.
2. Remove all screws fastening the wood frame enclosure. Spread wood frame open and lift away from plastic-bagged stove body. The bottom pieces of pallet wood will remain bolted to the stove body.
3. Remove plastic bag from stove body.
4. Remove back panel from stove, if equipped (See Figure 5). Use an adjustable wrench or a 10 mm socket. Remove six (6) bolts and washers. Keep bolts and washers to reattach back panel later.
5. Remove all contents from inside stove cavity. Contents include:
 - (4) - Legs (includes leg leveler bolts)
 - (1) - Bottom door
 - (3) - Top grates
 - (1) - Hardware kit bag with fasteners
6. Carefully lay stove body on back to attach bottom components to stove body (See Figure 6). Rest stove on drop cloth or blanket to avoid scratching stove edges.
7. Remove remaining pallet wood attached to bottom of stove body (See Figure 6). Use an adjustable wrench to remove bolts.

CAUTION: Cast Iron is brittle.

Do not over-tighten bolts or screws during assembly.

8. Fasten each leg to stove with four (4) M8 x 1.25—20 mm bolts. Use a flat washer and lock washer with each bolt. Tighten bolts into threaded holes on stove body (See Figures 7 and 8). Use an adjustable wrench or a 12mm socket.

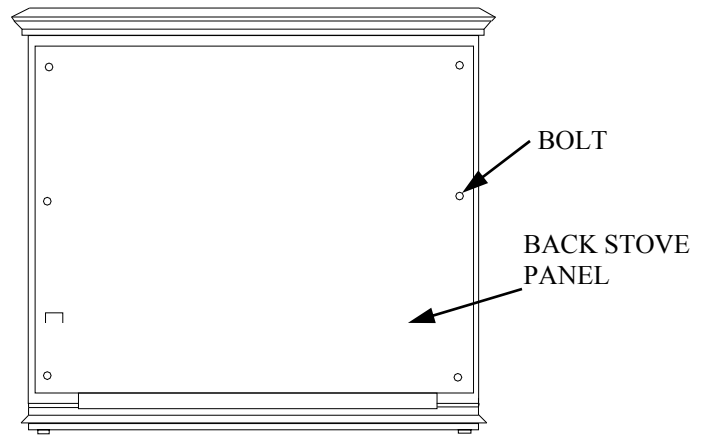


FIGURE 5 - REMOVING BACK PANEL

NOTE: CVF200's series are not equipped with a back panel.

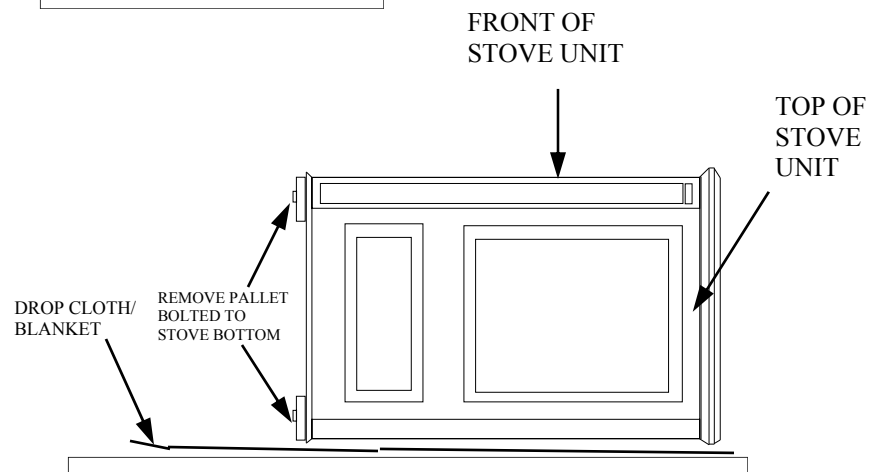


FIGURE 6 - LAYING DOWN STOVE ON SIDE

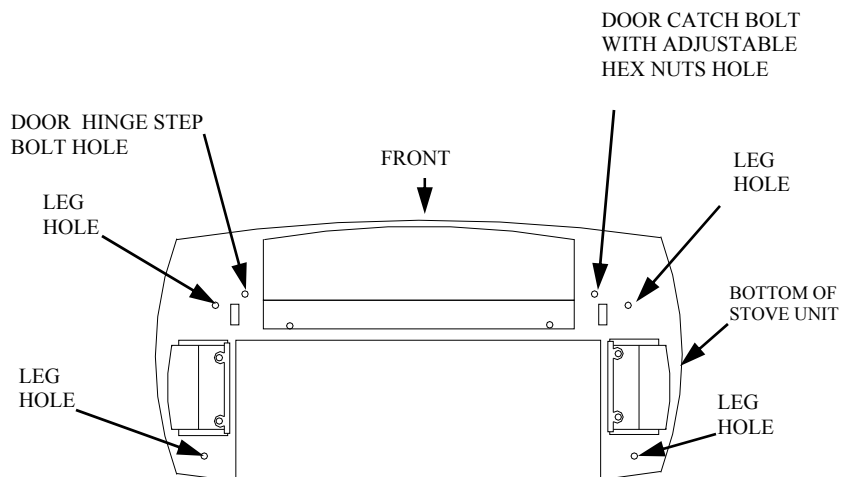


FIGURE 7 - LOCATING THREADED HOLES FOR STOVE BOTTOM, LEGS

INSTALLATION

Continued

9. Attach stove door by inserting step bolt through door hinge pivot hole and into threaded hole in stove body (See Figure 9 and 10 on page 8). Use an adjustable wrench or a 12mm socket to fasten step bolt. Tighten step bolt until snug. Make sure door moves freely.
10. Install door catch bolt (M8 x 1.25 – 55mm with two M8 hex nuts) into threaded hole on stove body (See Figure 10, page 8). Use an adjustable wrench or a 12mm socket. The catch bolt has two hex nuts attached to it. The top nut is a bolt stop and the bottom nut is for door leveling adjustment.
11. Check general catch bolt alignment with door claw. Make final adjustment and door leveling after stove is in normal standing position.
12. Carefully lift stove back up on its four attached legs.
13. Set top grate into stove top.
14. If available, install gas log heater inside stove cavity before installing the back panel (See *Installing Gas Log Heater Into Stove*, page 9).
15. Fasten back panel to stove with six (6) M6 x 1—20mm bolts and washers. Make sure product identification label is located on the outside in lower left hand corner.

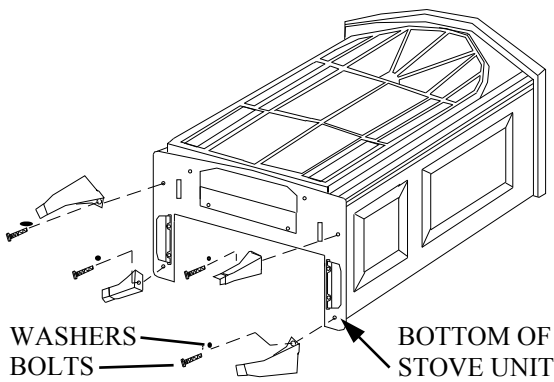


FIGURE 8 - ATTACHING STOVE LEGS

NOTE: IF YOUR CASTING HAS A DROP BOTTOM— DO NOT INSTALL— DISCARD THE BOTTOM.

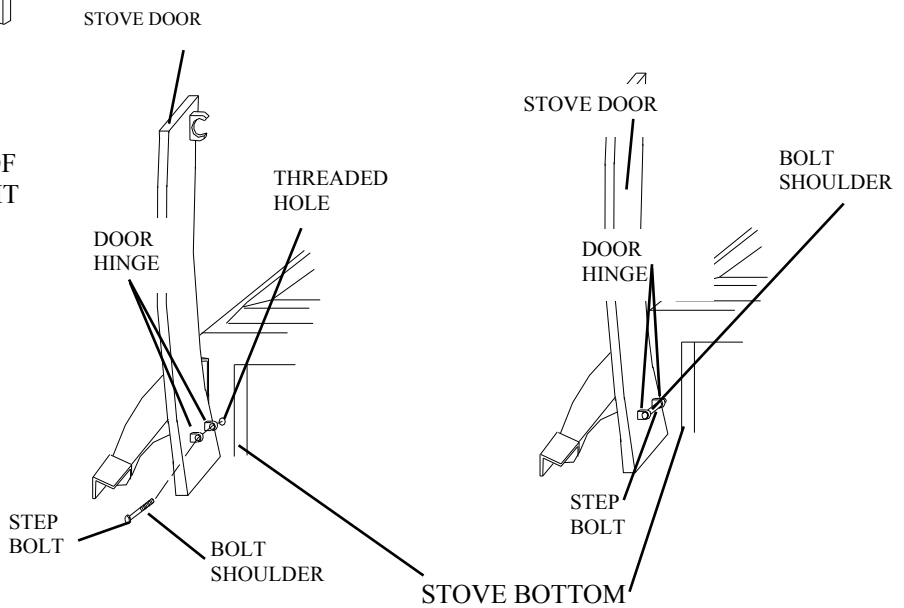


FIGURE 9 - ATTACHING STOVE DOOR

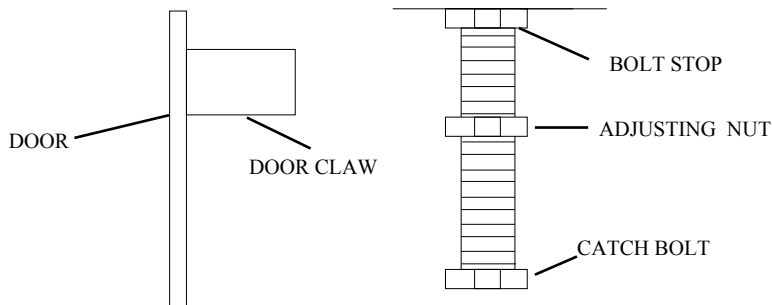


FIGURE 10 - CATCH BOLT AND DOOR CLAW ORIENTATION

INSTALLATION

Continued

INSTALLING GAS LOG HEATER (BASE) MODELS MA C100BATLP OR MA C100BATNAT

CAUTION: Do not remove the metal data plates attached to the heater base assembly. The data plates contain important warranty information.

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

CAUTION: After installation and periodically thereafter, check to ensure that no flame comes in contact with any log. With the heater set to High, check to see if flames contact any log. If so, reposition logs according to the log installation instructions in this manual. Flames contacting logs will create soot.

1. Remove log and gas log heater from carton. **NOTE:** Do not pick up gas log heater by the burner itself. This could damage heater. Always handle the gas log heater by the heater base only.
2. Remove all protective packaging applied to log and gas log heater for shipment.
3. Check all items for any shipping damage. If damaged, promptly inform dealer where you bought heater.
4. If not already removed, remove back panel from assembled stove body, if equipped (See Figure 5, page 7). Use an adjustable wrench or a 10mm socket. Remove six (6) bolts and washers. Keep bolts and washers to reattach back panel later.
5. Facing rear of stove body place gas log heater base inside stove with control knob facing inner rear side of the stove.
6. Slide the Gas Log Heater Base forward until the front of the base is against the inner front rear side of the stove (See Figure 11).

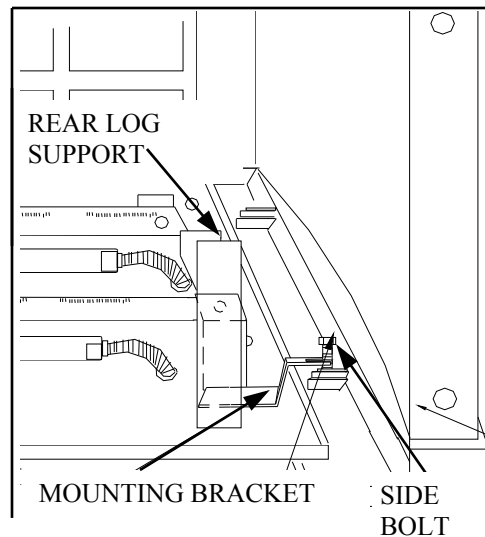
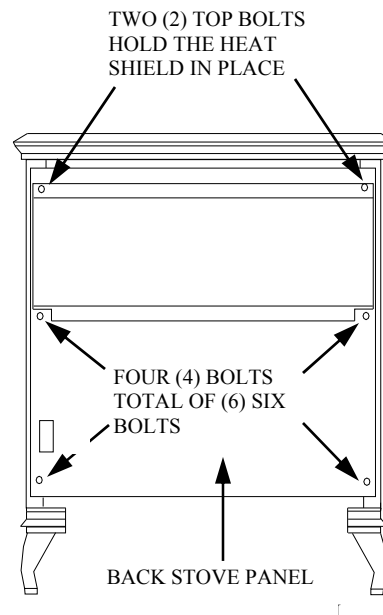
7. Loosen – Do Not Remove the two (2) rear side bolts of the stove, (one (1) on the left rear side, and one (1) on the right rear side). Then place a Mounting Bracket (Mounting Brackets provided and packaged with Log Heater Base) between the Bolt head and the stove body. Ensure that the other end of the Mounting Bracket is placed on the heater base between the Rear Log Support and the Rear Burner Holder. Tighten the Bolts (See Figure 11).
8. Position logs on base as shown on page 10, Figure 13. **IMPORTANT:** Make sure log does not cover any burner ports and does not touch the stove cavity.
9. Position back panel with label at lower left corner. Fasten with bolts at each bottom corner. Do not tighten completely. Taking small heat shield provided with log base position it over back panel, align two (2) slotted holes in heat shield with the two (2) holes in the top of the back panel. Now fasten the heat shield to the back of the stove. Start the two (2) remaining bolts, now tighten all six (6) bolts. **NOTE:** Do not over-tighten bolts. Porcelain on back panel may crack. (See Figure 12)
10. Place freestanding stove in desired position in room. Be sure to maintain clearances to combustibles as outlined on page 6.

NOTE: After positioning stove in desired position, connecting gas supply and completing all pressure checks and lighting the heater, make sure flame is not contacting logs. If flame is contacting logs, reposition logs so flame does not contact logs.

NOTE: Heat Shield is provided with the Log Heater Base unit.

NOTE: Back Panel is provided with the Stove unit.

FIGURE 12 - BACK PANEL AND HEAT SHIELD



NOTE: Mounting Brackets must be placed between the Rear Log Support and the Rear Burner Holder. Brackets must be tightened before Back Panel is replaced.

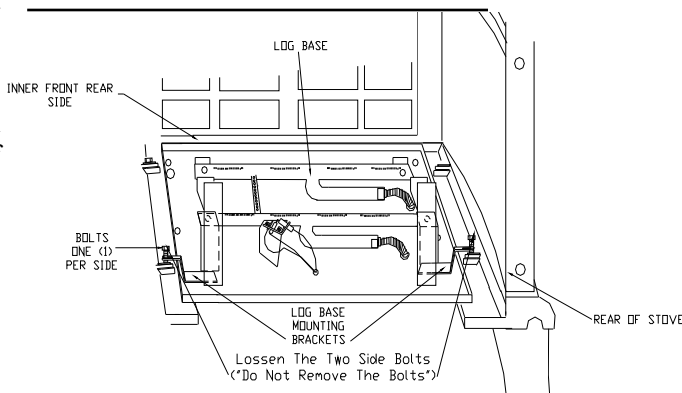


FIGURE 11 - INSTALLING LOG HEATER

POSITIONING OF LOGS

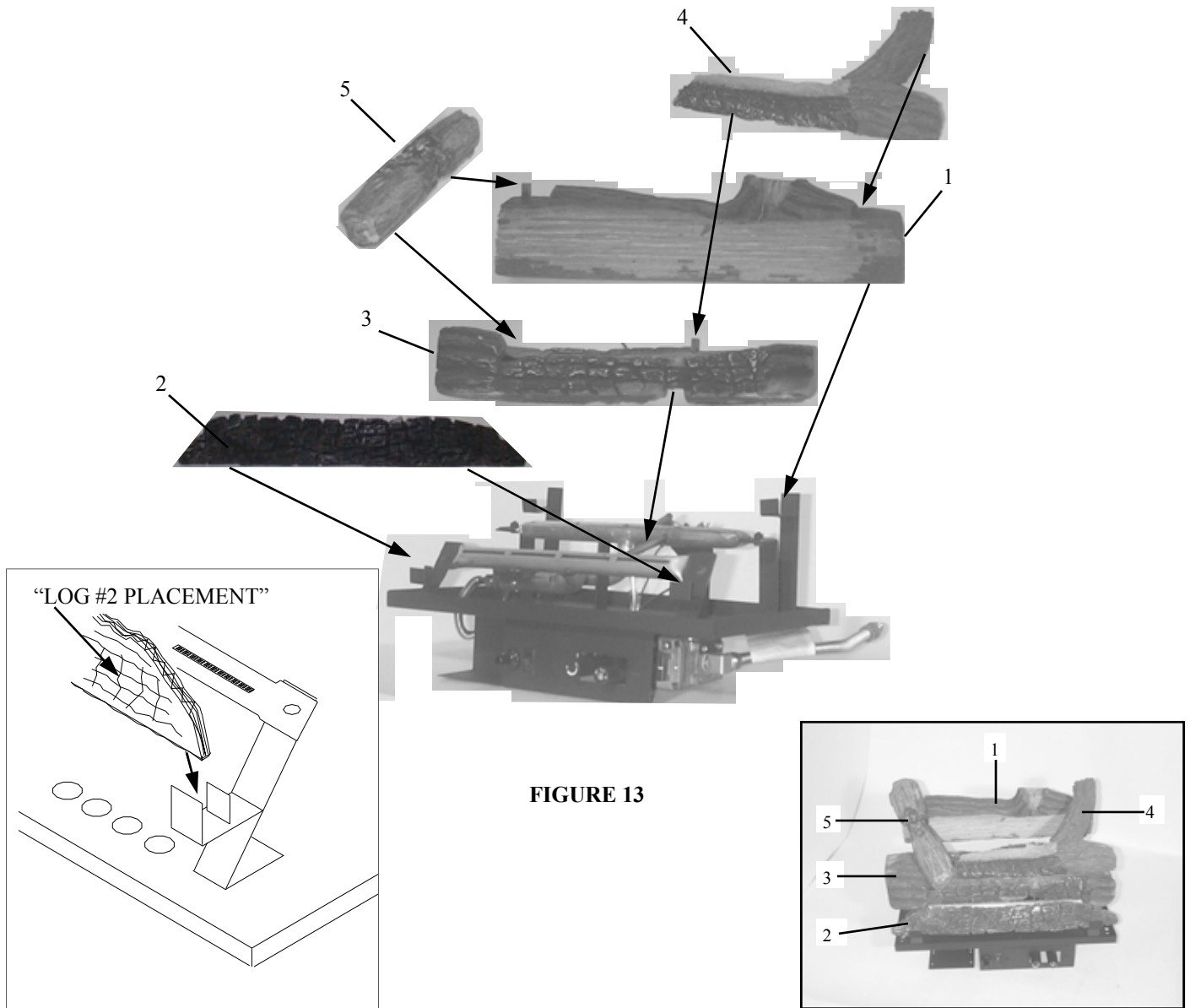


FIGURE 13

**WARNING: POSITIONING LOGS IS VERY CRITICAL (SEE FIGURE 13).
LOG PLACEMENT FOR LOG SET**

- 1) Place rear log (flat faced) #1 on rear log support. The log has alignment notches on each corner.
- 2) Place ember strip (wrapped in cardboard box) #2 on front log supports. Center from side to side.
- 3) Next place middle log (with ember burn out) #3 over front burner tube. The two ends are notched out on bottom to ensure proper fitting over ends of burner.
- 4) Right top log is a "y" shaped log #4. The round stem lays in the notched out space on the right corner of rear log. There is a pin on the middle log, and a hole on the flattened end of the top left log. Place hole over pin.
- 5) Place one end of the left top log #5 in notch of left corner on rear log and the other end of the left top log in notch on top middle log.

NOTE: When operated for the first time, the logs may emit a "paper burning" smell. This smell will gradually diminish and will be totally eliminated after the first few hours of operation.

INSTALLATION

INSTALLING GAS LOG HEATER FIREBOX MODELS MA CVFB200LP OR MA CVFB200NAT

CAUTION: Do not remove the metal data plates attached to the heater assembly. The data plates contain important warranty information.

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

CAUTION: After installation and periodically thereafter, check to ensure that no flame comes in contact with any log. If so, reposition logs according to the log installation instructions in this manual. Flames contacting logs will create soot.

1. Remove logs and heater from carton.
NOTE: Do not pick up gas heater by the burner itself. This could damage heater. Always handle the heater by the firebox only.

2. Remove all protective packaging applied to logs and gas log heater for shipment.

3. Check all items for any shipping damage. If damaged, promptly inform dealer where you bought heater. Place the logs into the Firebox and follow the directions on page 10, Figure 13.

4. If not already removed, remove back panel from assembled stove body (Stoves sold for the use of a Model CVF200's series may not have a back panel, just the bolts). See back panel and bolts on page 7, Figure 5. Use a 10mm socket or an adjustable wrench. Remove six (6) bolts and washers. Keep bolts and washers to attach Rear Mounting Brackets.

5. From rear of stove slide the Firebox into the Cast Stove until the front of the Firebox touches the inner front rear side of the stove. The Firebox has two Alignment Guides made to the bottom of the Firebox. These will ensure a more proper center alignment of the Firebox in the Cast Stove. Then take the mounting bracket without a switch holder and align slots in bracket with top and bottom holes on right side of stove. Fasten with bolts provided. (See Figure 14)

6. Inside of Firebox you will find three (3) wires with a switch attached. Disconnect the wires from the switch. Using the remaining mounting bracket with the switch holder on top, feed the wires through the wire channel starting at the end opposite the switch holder. Continue through the switch hole in top. Reconnect the three (3) wires to the switch (make sure the red wire is connected to the Manual side of the switch, see page 33). Position the switch in the switch holder, press until switch locks into position. (See Figure 15). Take mounting bracket and attach to left rear side of stove, with bolts provided. (See Figure 14)
7. Place freestanding stove in desired position in room. Be sure to maintain clearances to combustibles as outlined on page 6.
8. After positioning stove in desired position, connect gas supply and complete all pressure checks and light the heater. (See page 14 *Connecting To Gas Supply*)

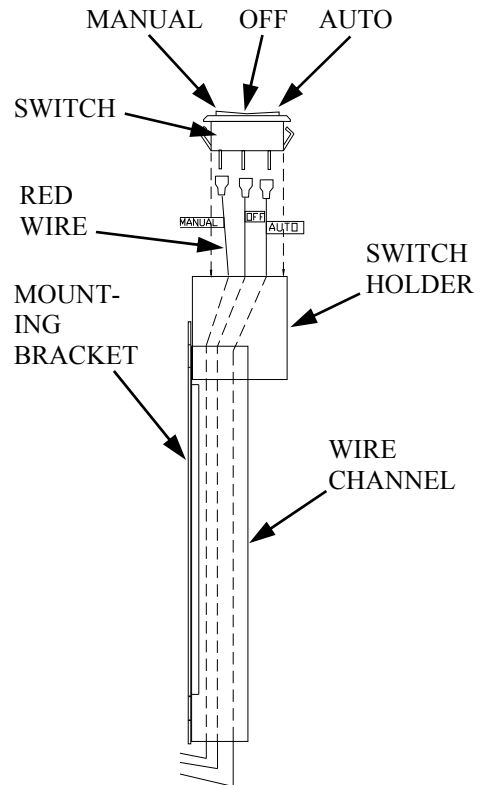


FIGURE 15 - BRACKET/WIRE CHANNEL SWITCH HOLDER (ALSO REFER TO PAGE 16)

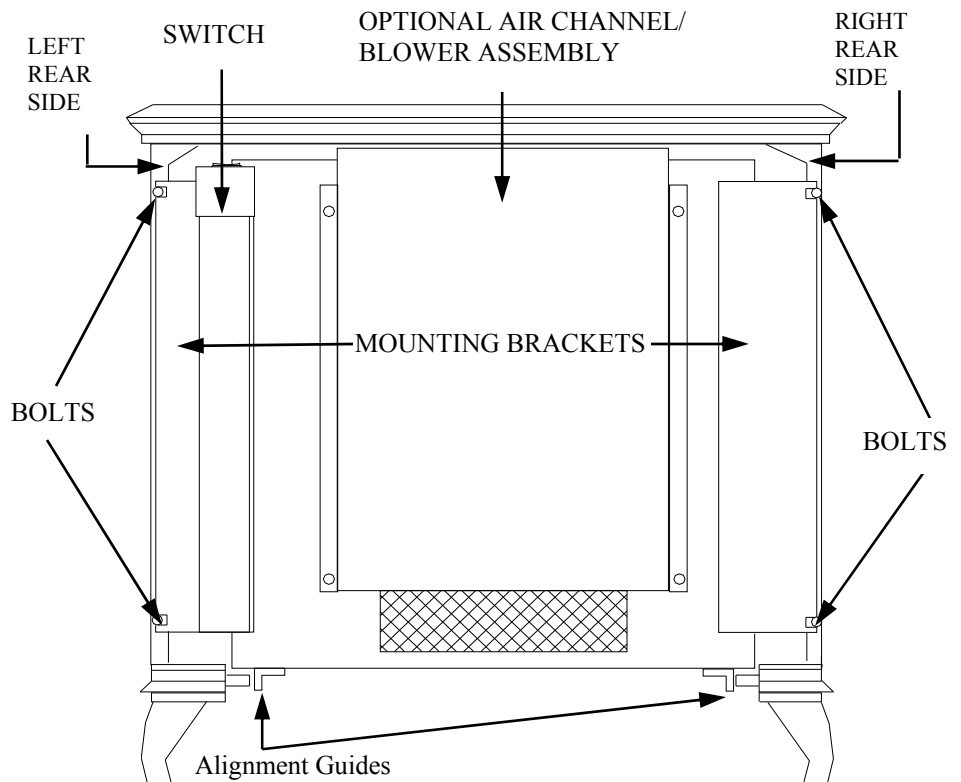


FIGURE 14 - BACK OF STOVE WITH FIREBOX INSERT / MOUNTING BRACKETS / SWITCH/ OPTIONAL AIR CHANNEL WITH BLOWER.

CONTINUED

9. After lighting the heater check to ensure that the log placement is correct, and that no flame is coming in contact with the logs. If log placement is incorrect reverse steps 5 and 6, and see page 10, Figure 13.

REMOVING CAST STOVE FRONT PANEL

If at some time you may need to remove the front panel of your Cast Stove unit for servicing or replacement follow these steps.

A. Facing the front of the unit with access door in the closed position remove the two (2) hex screws holding bottom front of stove in place. Screws are located on the bottom front between the access door and front legs. You may discard the screws. (See Figure 16)

B. Remove the Center Grate located on the top of the unit.

C. Using an Allen wrench, remove the Alignment Stud (Allen Screw) from the top front center of the unit.

NOTE: Be prepared to hold the Front Panel while removing the Alignment Stud. The panel may come out by applying pressure, and may cause damage to the panel or cause personal injury.

D. Replace front panel and (Allen screw) Alignment Stud before returning to normal usage.

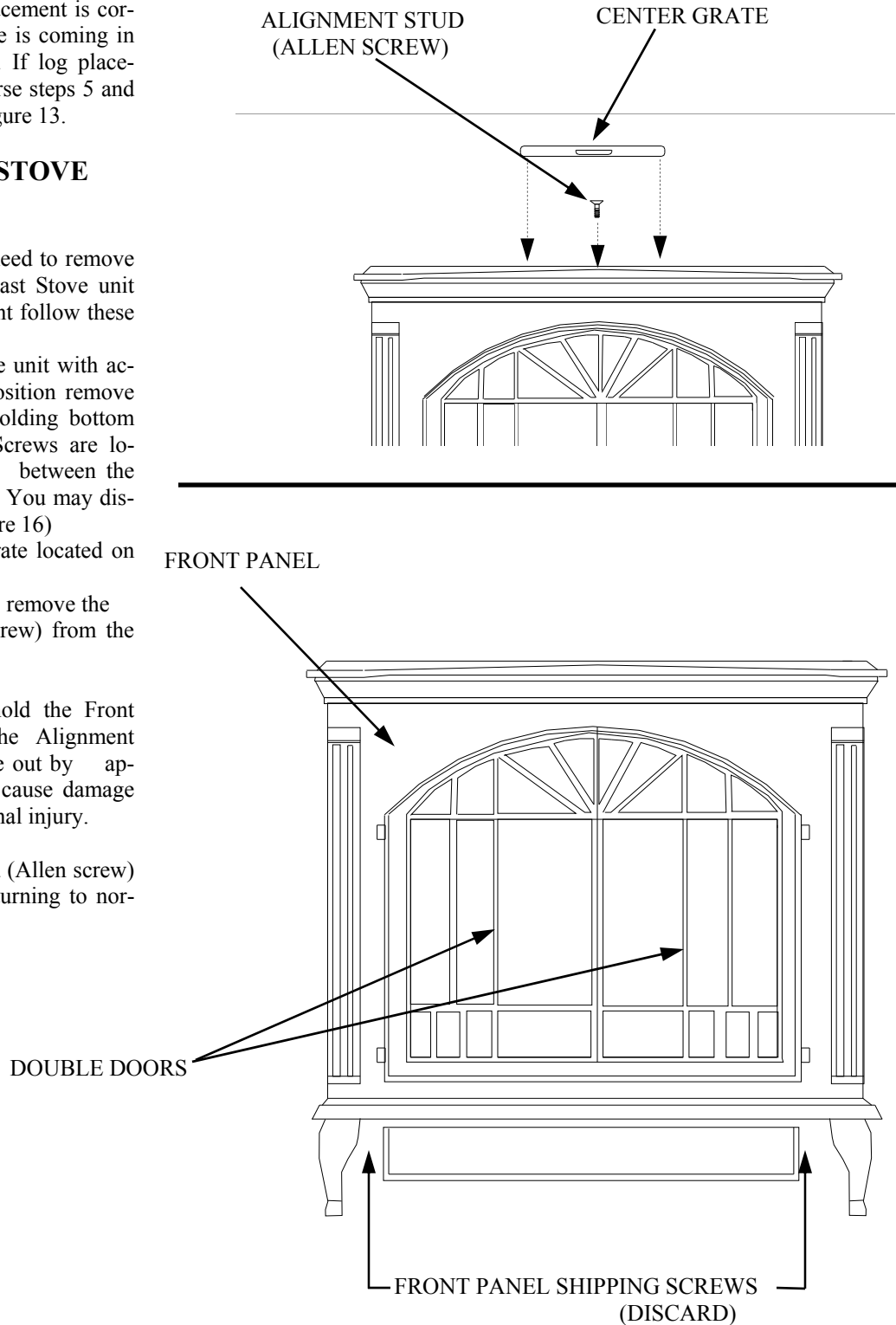


FIGURE 16 - FRONT OF CAST STOVE/FRONT PANEL

INSTALLATION OF OPTIONAL BLOWER ASSEMBLY (MODEL MA CVF714)

WARNING: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved may result in improper functions, or property damage, or personal injury.

1. Remove Blower Assembly from carton. Remove all protective packaging applied to Blower Assembly for shipment.
2. Check all items for any shipping damage. If damaged, promptly inform dealer where you purchased the Blower Assembly.
3. From the rear of the Fire Box, align the four (4) notches in the Blower Assembly with (4) holes in the rear of the Fire Box. This will ensure the centering of the Blower Assembly on the Fire Box.
4. After determining the area of placement for the Blower Assembly, attach the Blower Assembly to the Fire Box using the four (4) #8 x 1/2" self-piercing mounting screws provided.

CAUTION: The Blower Assembly is equipped with a Power Cord. Make sure that the Power Cord does not get under the Blower Assembly or become damaged while being installed.

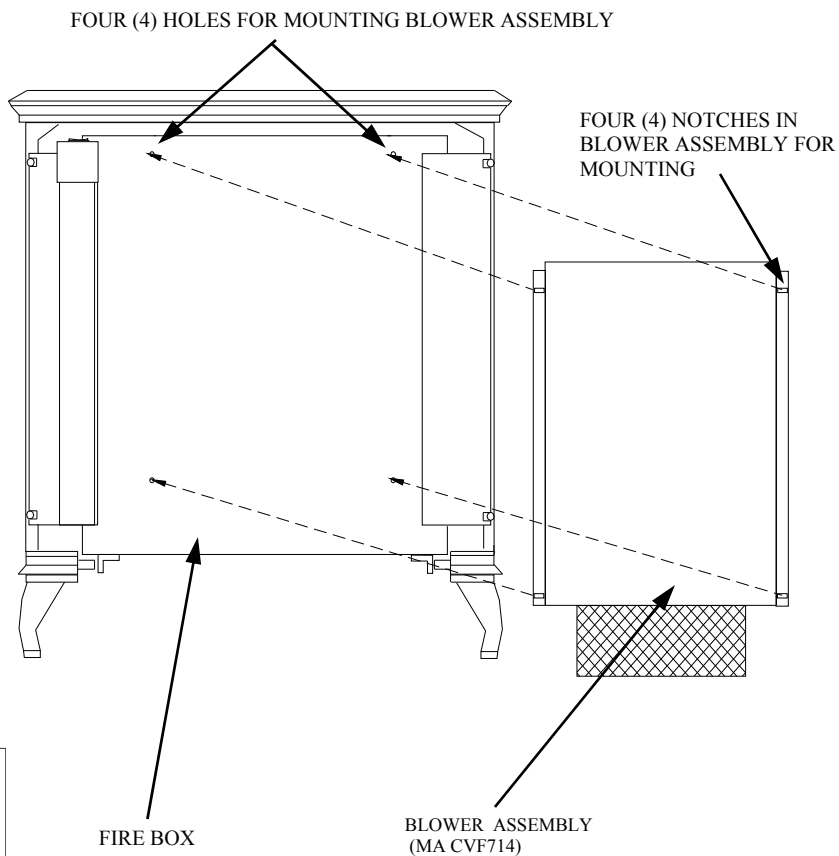
WARNING: Electrical Grounding Instructions: This appliance is equipped with a three prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. DO NOT cut or remove the grounding from this plug.

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

Verify proper operation after servicing.

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with a wire of at least a 105°C temperature rating.

WARNING: Only New Buck Corporation approved blower assembly, part number MA CVF714, may be used with Townsend II unit only.



INSTALLATION

Continued

CONNECTING TO GAS SUPPLY

WARNING: This appliance is equipped with a 3/8" NPT (National Pipe Thread) inlet connection to the pressure regulator.

WARNING: A qualified service person must connect heater to gas supply. Follow all local codes.

Installation Items Needed

Before installing heater, make sure you have the items listed below:

- piping (check local codes)
- sealant (resistant to LP gas)
- equipment shutoff valve
- tests gauge connection
- sediment trap
- tee joint
- pipe wrench

A CSA/AGA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA/AGA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 23.

The gas inlet connection for the stove heater is located on the lower right-hand side when viewed from the front of the unit. The gas connection can be made either through the bottom right side or through the lower back opening as illustrated in Figure 17. Make sure gas log heater is secured to the stove cavity assembly.

WARNING: Never connect heater to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to heater.

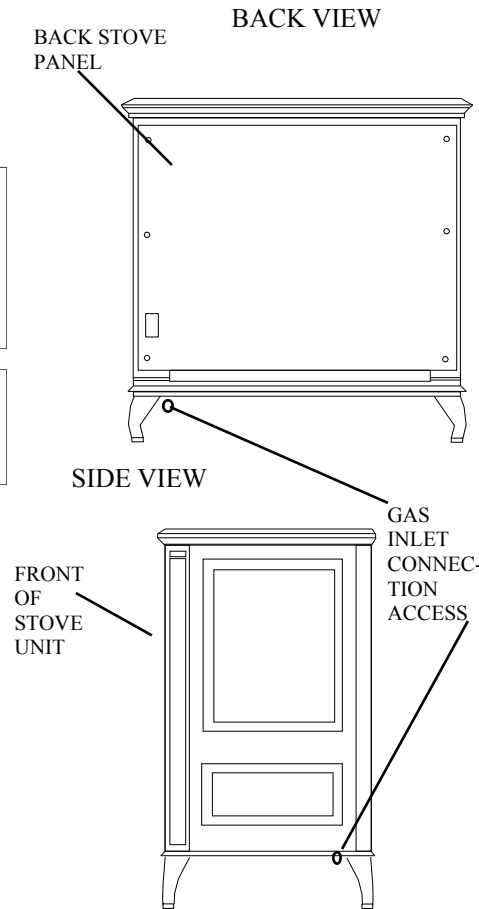


FIGURE 17 - GAS REGULATOR LOCATION AND GAS LINE ACCESS INTO STOVE CABINET

Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from heater (See Figure 18, BVFB series).

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged heater valves.

CAUTION: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

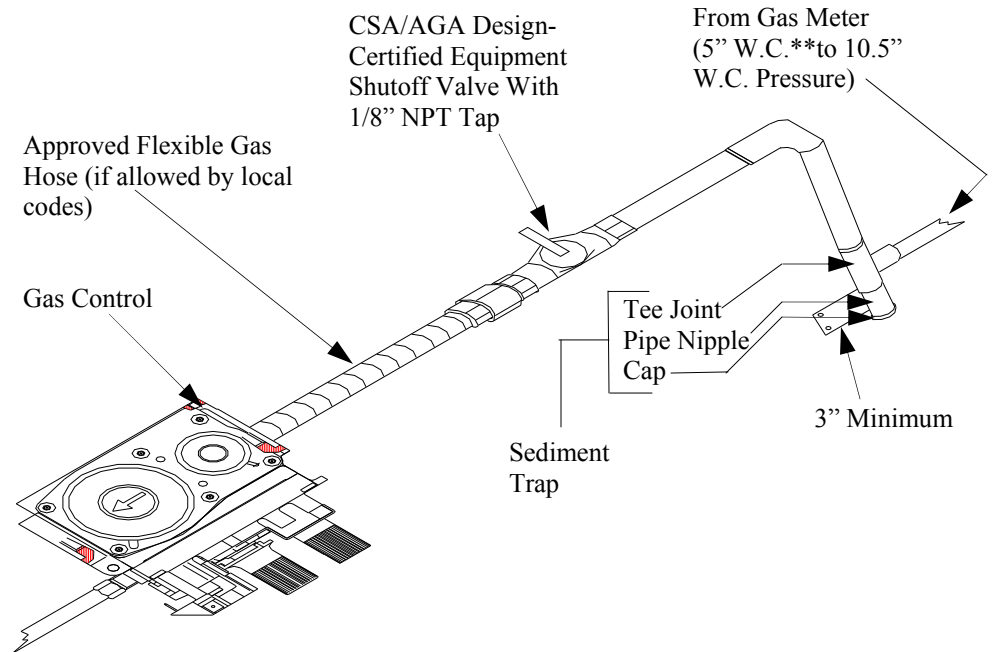


FIGURE 18 - GAS CONNECTION

INSTALLATION

Continued

We recommend that you install a sediment trap in supply line. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into heater controls. If sediment trap is not installed or is installed wrong, heater may not run properly.

CAUTION: Avoid damage to regulator. Hold gas regulator with wrench when connecting it to gas piping and/or fittings.

CHECKING GAS CONNECTIONS

WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

WARNING: Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

Pressure Testing Gas Supply Piping System

Test Pressures In Excess of 1/2 psi (3.5 kPa)

1. Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psi will damage heater regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.

4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 psi (3.5 kPa)

1. Close equipment shutoff valve (See Figure 19).
2. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
3. Check all joints from gas meter to equipment shutoff valve (See Figure 20). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

Pressure Testing Heater Gas Connections

1. Open equipment shutoff valve (See Figure 19).
2. Open main gas valve located on or near gas meter.
3. Make sure control knob of heater is in the OFF position.
4. Check all joints from equipment shutoff valve to control valve (See Figure 20). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light heater (See *Operating Heater*, pages 17 through 19). Check all other internal joints for leaks.
7. Turn off heater (See *To Turn Off Gas to Appliance on pages 17 through 19*).

Input Rating	Minimum 22,400	Maximum 32,000
Type of Gas	LP/Propane	Natural
Manifold Pressure	<input type="checkbox"/> 10.0"wc	<input type="checkbox"/> 3.5"wc
*Min. Inlet	10.5"wc	4.5"wc
Max. Inlet	13.0"wc	10.5"wc

**For purpose of input adjustment.*

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

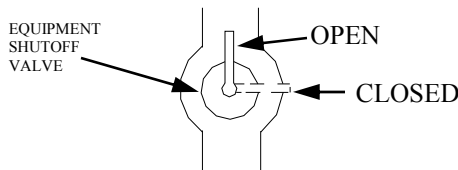


FIGURE 19 - EQUIPMENT SHUTOFF VALVE

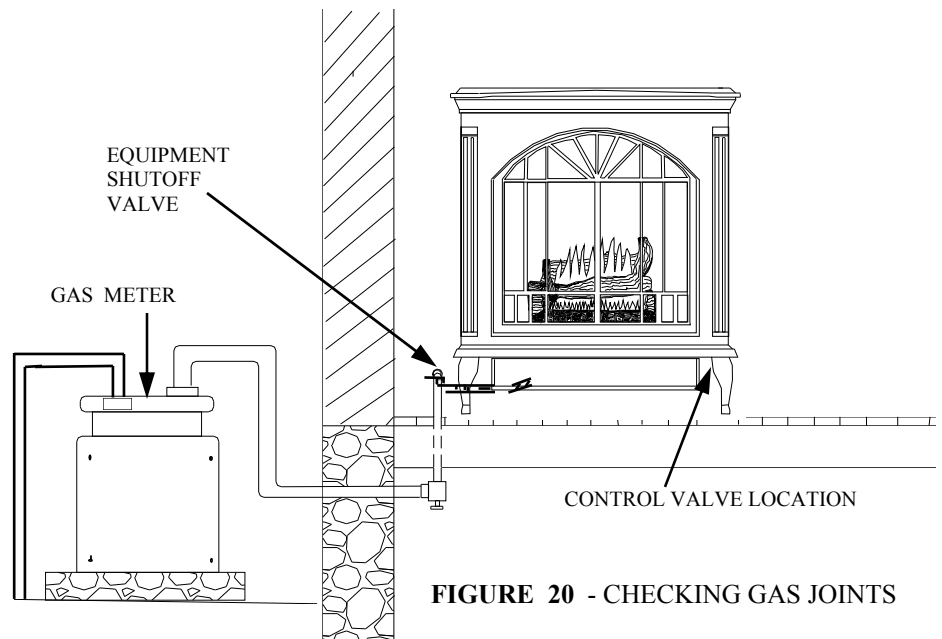
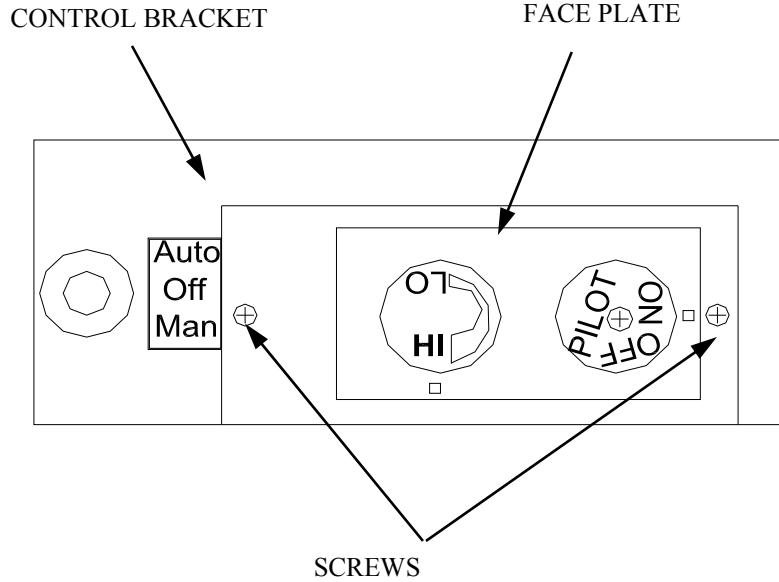


FIGURE 20 - CHECKING GAS JOINTS

FRONT ACCESS TO (SIT) MILLIVOLT VALVE

When performing pressure checks or wiring accessories such as remote control, or wall mounting thermostats it will be necessary to access the front of the valve body.

To access the front of the valve body, you must remove the face plate from the control bracket. To remove the face plate you will need to remove the two (2) Phillip head screws which attach it. After removing the screws, pull the face plate back from the unit. This will give you the access you need. When finished reattach the face plate to the control bracket with the screws you removed before operating the unit.

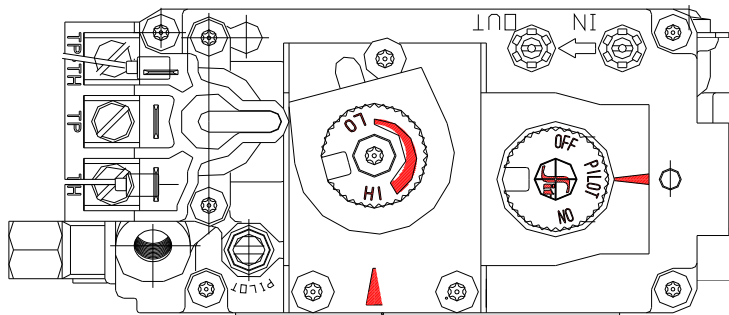


(SIT) MILLIVOLT VALVE WITH FACE PLATE ON

CAUTION

If unit has been in operation, allow the unit time to cool before touching. Failure to do so may result in personal injury.

NOTE: To ensure proper connection of switch refer to page 32. Make sure the proper wires are used for thermostat and remote control connections, if not installed correctly the unit will not operate.



(SIT) MILLIVOLT VALVE WITHOUT FACE PLATE

OPERATING HEATER

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 by hand. When lighting the pilot, follow these instructions exactly. If piezo fails, then light the pilot using matches. Refer to *Manual Lighting Procedures*.
- B. **BEFORE OPERATING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- 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 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 or gas supplier. 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 SIT-MILLIVOLT VALVE

1. **STOP!** Read Safety Information.
2. Make sure manual shutoff valve is fully open. Set thermostat to lowest setting.
3. Turn off all electrical power to the appliance (if applies).
4. Turn control knob clockwise ➡ to the "OFF" position.
5. Wait (5) five minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP** and follow "B" in the safety information! If you don't smell gas, go to the next step.
6. Turn control knob counterclockwise ⬅ to the "PILOT" position. Press in control knob for (15) fifteen seconds.

NOTE: You may be running this heater for the first time after hooking up the gas supply. If so, the control knob may need to be pressed in for (30) thirty seconds. This will allow air to bleed from the gas system.

7. With control knob pressed in, push down and release ignitor button. This will light the pilot. If needed, keep repeating this step until pilot lights. Pilot is located between middle and rear logs. If pilot does not light with piezo, light by hand with a match.
8. Keep control knob pressed in for (1) one minute after lighting pilot. After (1) one minute, release control knob.

*Please refer to page 25 for location and picture of pilot.

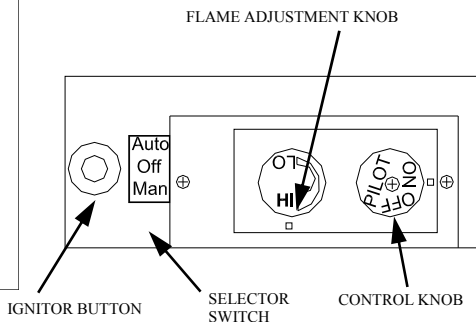


FIGURE 21 - CONTROL KNOB AND IGNITOR BUTTON LOCATION

*If 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 knob to the "OFF" position and call your service technician or gas supplier.

NOTE: If pilot goes out, repeat steps 4 through 8. Wait (5) five minutes before attempting to light pilot again.

9. Turn control knob counterclockwise ⬅ to "ON" position.
10. If using unit without wall thermostat place "AUTO/OFF/MANUAL" switch into the manual position. If using wall thermostat place "AUTO/OFF/MANUAL" switch into the auto position and place thermostat to a setting higher than the room temperature.
11. Turn all electrical power on to the appliance (if applies).
12. Your heater is equipped with a "HI/LO" control. Turn clockwise for Low and counterclockwise for High.

TO TURN OFF GAS TO APPLIANCE SHUTTING OFF UNIT

1. Turn control knob clockwise ➡ to the "OFF" position.
2. Turn off all electric power to the appliance if service is to be performed.

SHUTTING OFF BURNER ONLY (Pilot stays lit.)

1. Turn control knob clockwise ➡ to the "PILOT" position.

CAUTION

Hot while in operation. Do Not Touch. Keep children, clothing, furniture, gasoline, and other liquids having flammable vapors away.

CAUTION

DO NOT TRY TO ADJUST HEATING LEVELS BY USING THE MANUAL SHUTOFF VALVE.

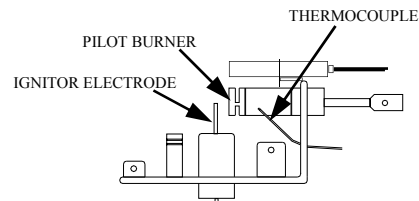


FIGURE 22 - O.D.S. PILOT ASSEMBLY SHOWN AS L.P. GAS.

OPERATING HEATER

Continued

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury, or loss of life. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

IMPROPER: Always operate the appliance at the completely “ON” or the completely “OFF” positions. Never use the heater at a setting between these positions as this can result in improper combustion and excessive carbon monoxide emissions.

Keep burner and control compartment clean.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 5 under *Lighting Instructions*, page 17.
2. Depress control knob and light pilot with match and lighter rod.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow steps 8 through 11, page 17.

OPTIONAL REMOTE CONTROL

NOTE: All remote control accessories must be purchased separately (see *Accessories*). Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the remote control unit. See *Lighting Instructions* on page 17.

OPERATING HEATER

Continued

PILOT FLAME PATTERN (MILLIVOLT)

Figure 23 shows a correct pilot flame pattern. Figure 24 shows an incorrect pilot flame pattern. The incorrect pilot flame is not heating the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the heater will shut down.

If pilot flame pattern is incorrect, as shown in Figure 24:

- Turn heater off (see *To turn Off Gas to Appliance*, page 17)
- See *Troubleshooting*, pages 20 through 22.

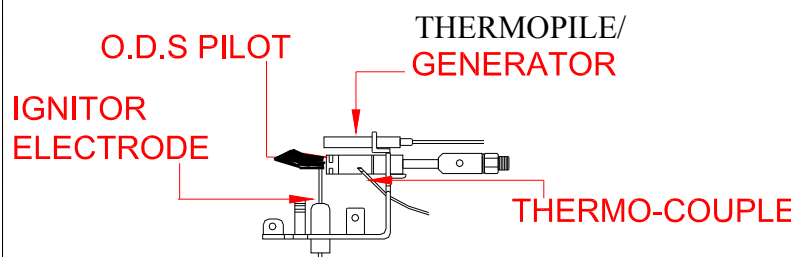


FIGURE 23 - CORRECT FLAME PATTERN L.P. OR NAT. GAS

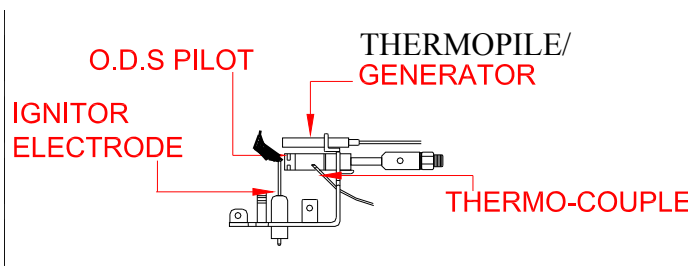


FIGURE 24 - INCORRECT PILOT FLAME PATTERN L.P. OR NAT. GAS

INSPECTING AND CLEANING MAINTENANCE

WARNING: Turn off heater and let cool before cleaning.

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

CLEANING BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint, and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have heater inspected yearly by a qualified service person.

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly. **NOTE:** Removing the rear panel (Figure 5, page 7) and top grates of your stove will make cleaning easier.

1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
2. Inspect burner, pilot, and slots in air shutter for dust and dirt.
3. Using Phillips head driver loosen set screw on air shutter and rotate shutter toward rear of unit. **NOTE:** Before rotating shutter mark the position of shutter so you can

move it back to the correct position after cleaning.

4. Opening the shutter as in step 3, allows you to inspect the orifice. After cleaning the area adjust air shutter to the original position.
5. Blow air through the slots and holes in the burner.
6. Blow air into the primary air holes on the injector holder.
7. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (See Figure 26). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

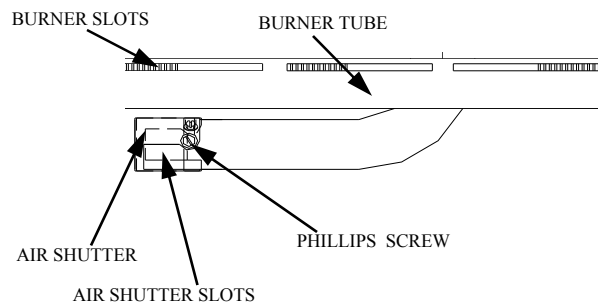


FIGURE 25 - BURNER/ AIR SHUTTER

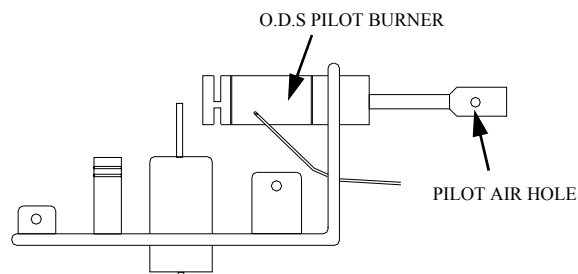


FIGURE 26 - PILOT ASSEMBLY

LOGS

- If you remove logs for cleaning, refer to *Installing Gas Log Heater into Stove*, page 9, to properly replace logs.

MAIN BURNER

Periodically inspect all burner flame holes with the heater running. All slotted burner flame holes should be open with flame present. Some burner flame holes may become blocked by debris or rust, with no flame present. If so, turn off heater and let cool. Either remove blockage or replace burner. Blocked burner flame holes will create soot.

TRANSPORTING STOVE

Porcelain enamel coatings contain glass and are brittle. To prevent cracking of the porcelain finish, do not transport stove with top grates in place.

TROUBLESHOOTING

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

CAUTION: Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

NOTE: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	<ol style="list-style-type: none"> 1. Ignitor electrode not connected to ignitor cable 2. Ignitor cable pinched or wet 3. Broken ignitor cable 4. Bad piezo ignitor 5. Ignitor electrode broken 6. Ignitor electrode positioned wrong 	<ol style="list-style-type: none"> 1. Reconnect ignitor cable 2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry 3. Replace ignitor cable 4. Replace piezo ignitor 5. Replace piezo ignitor 6. Replace piezo ignitor
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	<ol style="list-style-type: none"> 1. Gas supply turned off or equipment shutoff valve closed 2. Control knob not in PILOT position 3. Control knob not pressed in while in PILOT position 4. Air in gas lines when installed 5. ODS/pilot is clogged 6. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open equipment shutoff valve 2. Turn control knob to PILOT position 3. Press in control knob while in PILOT position 4. Continue holding down control knob. Repeat igniting operation until air is removed 5. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 19) or replace ODS/pilot assembly 6. Replace gas control
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"> 1. Control knob not fully pressed in 2. Control knob not pressed in long enough 3. Equipment shutoff valve not fully open 4. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: <ol style="list-style-type: none"> A. Low gas pressure B. Dirty or partially clogged ODS/pilot 5. Thermocouple connection loose at control valve 6. Thermocouple damaged 7. Control valve damaged 	<ol style="list-style-type: none"> 1. Press in control knob fully 2. After ODS/pilot lights, keep control knob pressed in 30 seconds 3. Fully open equipment shutoff valve 4. Contact local natural gas company <ul style="list-style-type: none"> • Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 19) or replace ODS/pilot assembly 5. Hand tighten until snug, then tighten 1/4 turn more 6. Replace thermocouple 7. Replace control valve
Burner does not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Burner orifice clogged 2. Inlet gas pressure is too low 3. Burner orifice diameter is too small 4. Thermopile/Generator leads disconnected or improperly connected 5. Burners will not come on in remote position 	<ol style="list-style-type: none"> 1. Clean burner (see <i>Cleaning and Maintenance</i>, page 19) or replace burner orifice 2. Contact local gas company 3. Replace burner orifice 4. Reconnect leads 5. Replace battery in transmitter and receiver

TROUBLESHOOTING

Continued

OBSERVED PROBLEM

	POSSIBLE CAUSE	REMEDY
Delayed ignition burner	<ol style="list-style-type: none">1. Manifold pressure is too low2. Burner orifice clogged	<ol style="list-style-type: none">1. Contact local gas company2. Clean burner (see <i>Cleaning and Maintenance</i>, page 19) or replace burner orifice
Burner backfiring during combustion	<ol style="list-style-type: none">1. Burner orifice is clogged or damaged2. Damaged burner3. Gas regulator defective	<ol style="list-style-type: none">1. Clean burner (see <i>Cleaning and Maintenance</i>, page 19) or replace burner orifices2. Replace damaged burner3. Replace gas control
Slight smoke or odor during initial operation	<ol style="list-style-type: none">1. Not enough air2. Gas regulator defective3. Residues from manufacturing processes and logs curing	<ol style="list-style-type: none">1. Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Maintenance</i>, page 19)2. Replace gas control3. Problem will stop after a few hours of operation
Moisture/condensation noticed on windows	<ol style="list-style-type: none">1. Not enough combustion/ventilation air	<ol style="list-style-type: none">1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 3)
Heater produces a whistling noise when burner is lit	<ol style="list-style-type: none">1. Turning control knob to HI position when burner is cold2. Air in gas line3. Air passageways on heater blocked4. Dirty or partially clogged burner orifice	<ol style="list-style-type: none">1. Turn 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 gas company3. Observe minimum installation clearances (see page 6)4. Clean burner (see <i>Cleaning and Maintenance</i>, page 19) or replace burner orifice
Dark residue on logs or inside of fireplace	<ol style="list-style-type: none">1. Improper log placement2. Drafts or other air currents affecting flame pattern3. Air holes at burner inlet blocked4. Burner flame holes blocked	<ol style="list-style-type: none">1. Properly locate logs (see <i>Installing Gas Log Heater</i>, page 9)2. Eliminate source of drafts around heater3. Clean out air holes at burner inlet. Periodically repeat as needed4. Remove blockage or replace burner
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none">1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. turn into white powder residue	<ol style="list-style-type: none">1. Turn heater off when using furniture polish, wax, carpet cleaners, or similar products

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.

IMPORTANT: Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater produces a clicking/ticking noise just after burner is lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most heaters. If noise is excessive, contact qualified service person
Heater produces unwanted odors	1. Heater burning vapors from paint, hair spray, glues, cleaners chemicals, new carpet, etc. (see IMPORTANT statement above) 2. Gas leak. See WARNING statement at top of page	1. Open window and ventilate room. Stop using odor causing products while heater is running 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 15)
Heater shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 19)
Gas odor even when control knob is in OFF position	1. Gas leak. See WARNING statement at top of page 2. Control valve defective	1. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 15) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. See WARNING statement at top of page	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 15)

ACCESSORIES

Purchase these heater accessories from your local dealer. If they can not supply these accessories, call our Parts Department at 1-828-765-6144 for referral information. You can also write to the address listed on the back page of this manual.

RECEIVER AND HAND-HELD REMOTE CONTROL KIT PART# PO FDC-504

For remote-ready models. Allows the gas log heater to be turned on and off by using a hand-held remote control.

WALL THERMOSTAT PART# PE 400142

The desired comfort setting can be selected on the wall thermostat and the log heater will automatically cycle from pilot to the heat setting selected.

SERVICE HINTS

When Gas Pressure Is Too Low

- Pilot will not stay lit
- Burners will have delayed ignition
- Heater will not produce specified heat

When Gas Quality Is Bad

- Pilot will not stay lit
- Burners will produce flames and soot
- Heater will backfire when lit

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

REPLACEMENT PARTS

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

PARTS LIST
FOR MODELS MA C100BALTLP, MA C100BATNAT, AND
MA CVFB200LP, MA CVFB200NAT

MILLIVOLT (SIT)

KEY #	PART #	DESCRIPTION #
1	PE 8204C PE 8404C	PILOT ASSEMBLY NATURAL GAS PILOT ASSEMBLY L.P.
2	PO 10-2121-12	FLEXIBLE SUPPLY LINE
3	PE 820637 PE 820636	(SIT) MILLIVOLT VALVE NATURAL GAS (SIT) MILLIVOLT VALVE L.P.
4	PE 916188	ON/OFF KNOB EXTENSION
5	PE 916189	HI/LO KNOB EXTENSION
6	PE RC211RB	AUTO/OFF/MANUAL
7	PE 124461	PIEZO STRIKER
8	POT6-06	6" MANIFOLD SUPPLY LINE
8A	POT6-12	12" MANIFOLD SUPPLY LINE
9	PO H- BURN001	18" H-BURNER
10	PO 60MVORF PO 62MVORF PO 54MVORF PO 53MVORF PO 44MVORF	L.P. FRONT ORIFICE MA C100BALTLP (ONLY) LP. FRONT ORFICE MA CVFB200LP (ONLY) L.P. REAR ORIFICE NAT. FRONT ORIFICE NAT. REAR ORIFICE

NOTE: REFER TO PAGES 25 AND 26.

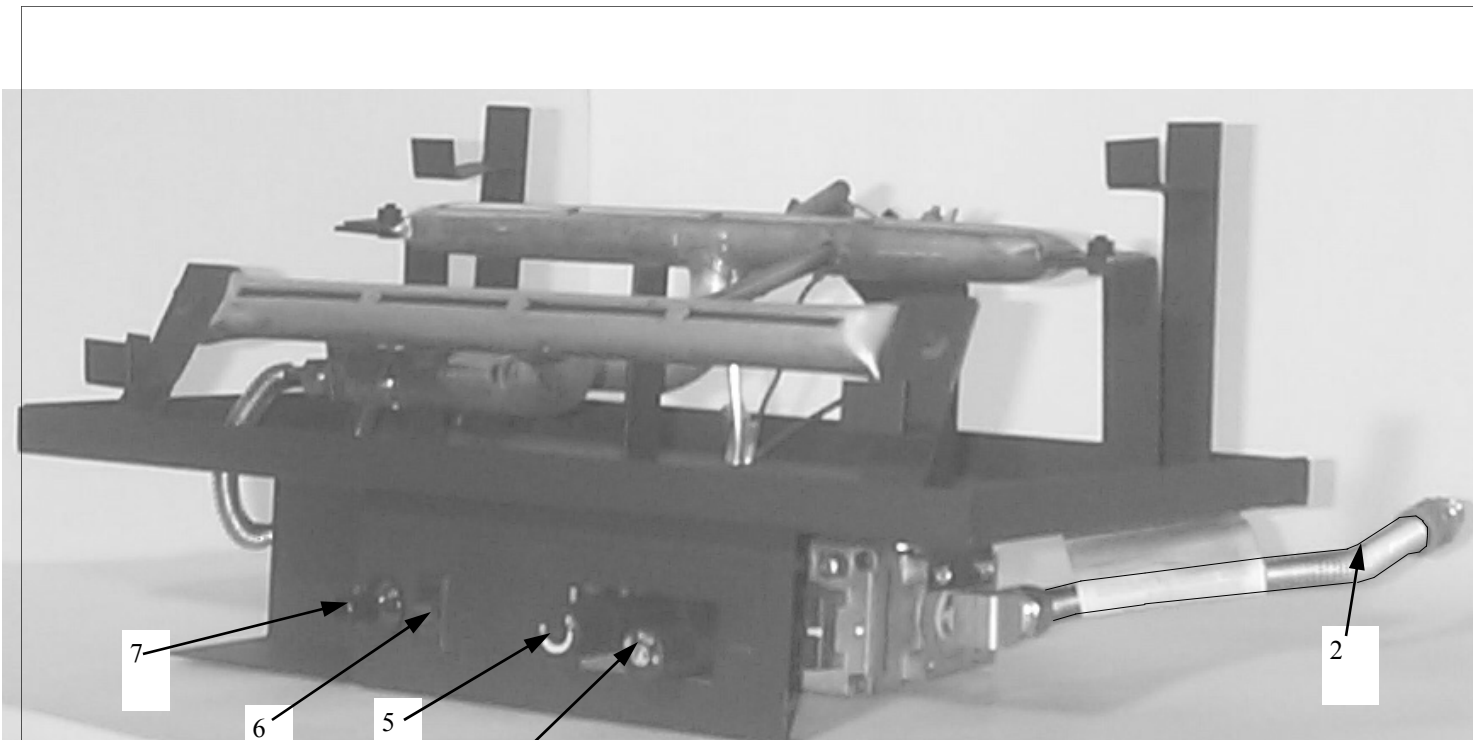
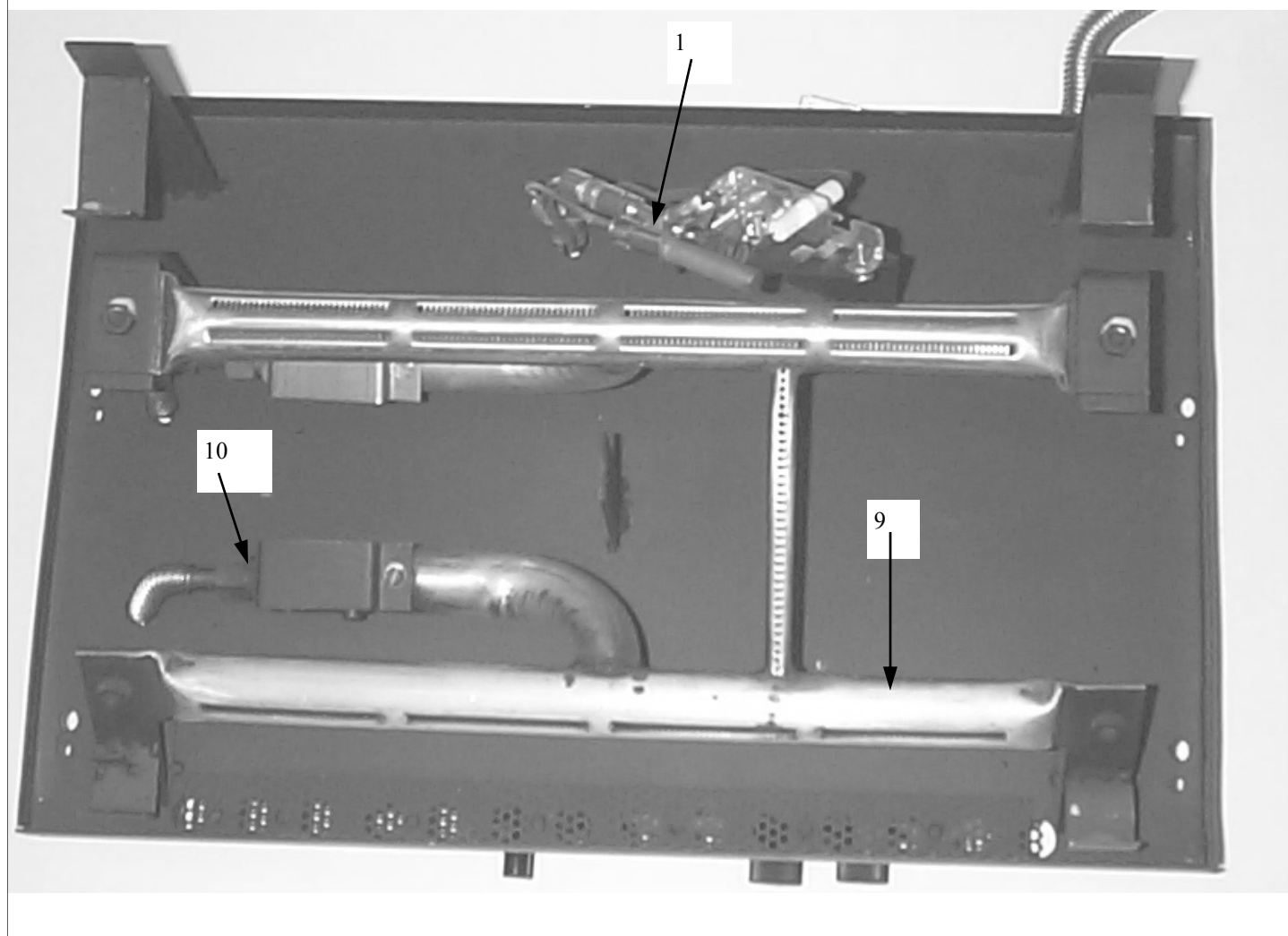


FIGURE 27 – PARTS



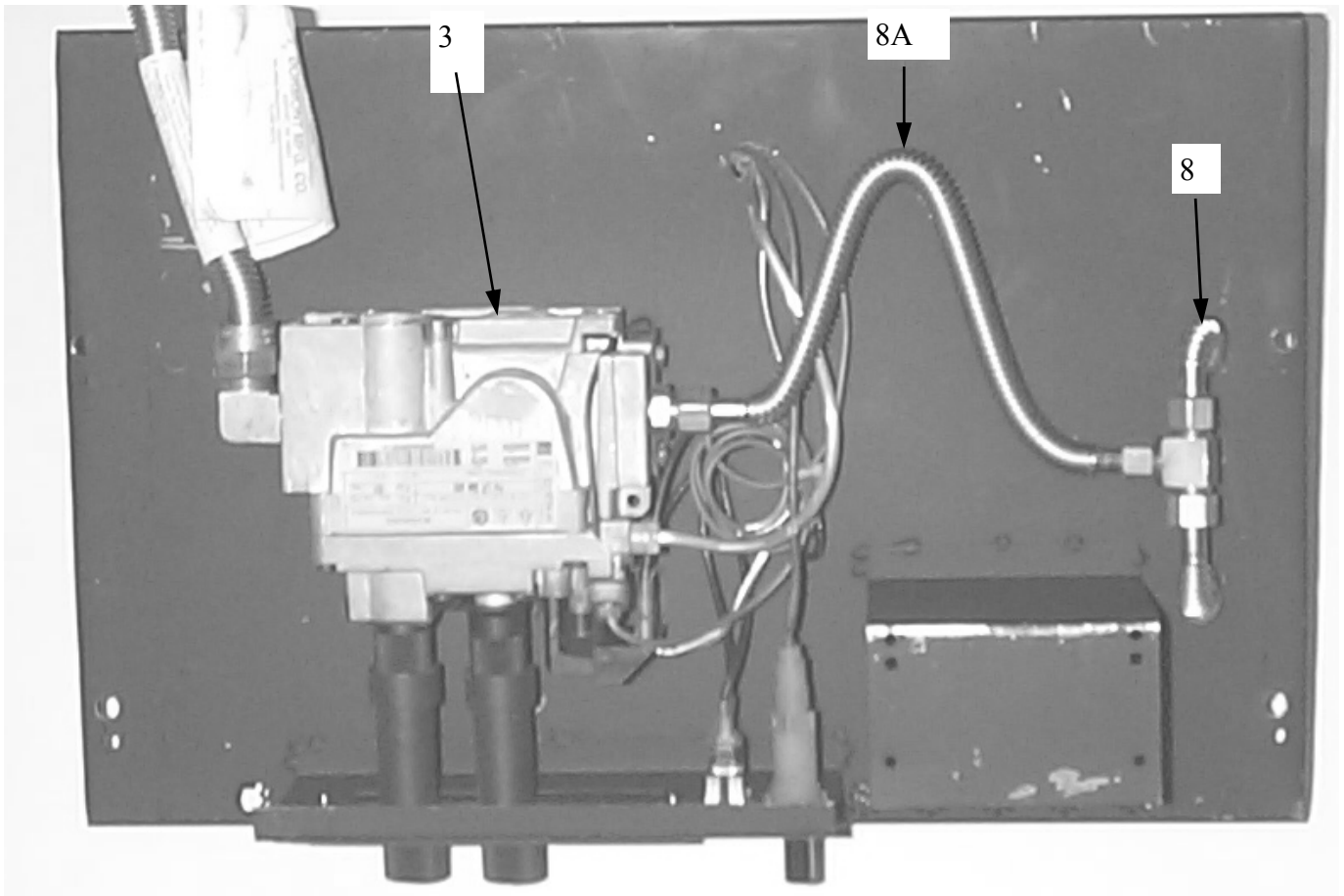
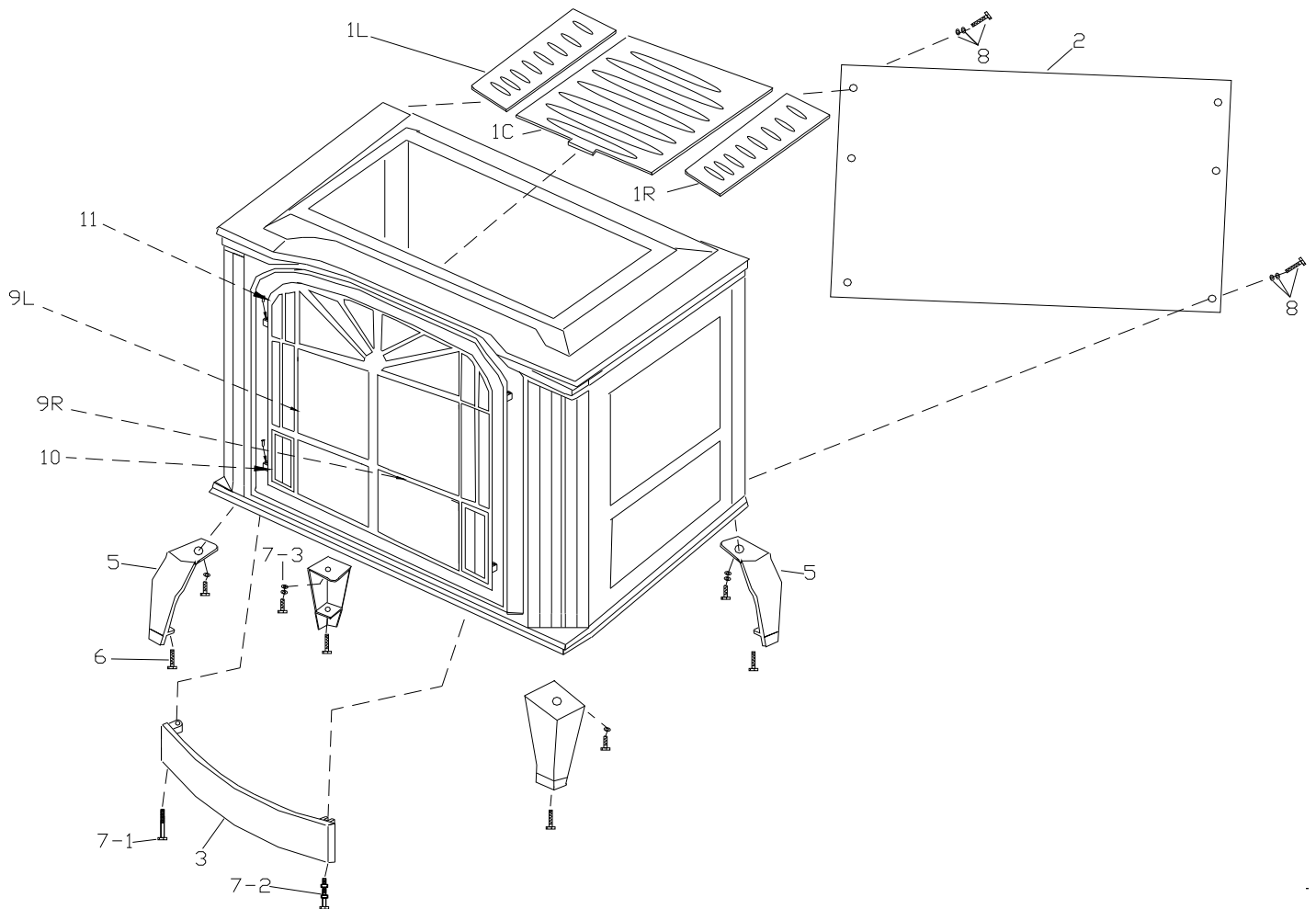


FIGURE 28 – VALVES AND SUPPLY LINES.

PARTS BREAKDOWN FOR CAST STOVE SERIES TOWNSEND II

(Discarded During
Assembly)



SEE PAGE 28 FOR PARTS DESCRIPTION AND PART NUMBERS.

PARTS LIST

TOWNSEND II

(* INDICATES COLOR SUFFIX DESIGNATION)

KEY QTY.	PART NO.	DESCRIPTION	
1C	104171-02	Top Grate with Screen (Center) (Black Only)	1
1L	104171-03	Top Grate with Screen (Left) (Black Only)	1
1R	104171-04	Top Grate with Screen (Right) (Black Only)	1
2	104172-02	Stove Back Panel (Black Only) (Optional on some models)	1
3	104173-09	Bottom Door (Metallic Green)	1
	104173-10	Bottom Door (Metallic Black)	1
	104173-11	Bottom Door (Porcelain Enamel Black)	1
	104173-13	Bottom Door (Porcelain Enamel Almond)	1
	104173-14	Bottom Door (Porcelain Enamel Green)	1
	104173-15	Bottom Door (Porcelain Enamel Red)	1
(4)	104174-04	Stove Dropped Bottom (Not Used)	—
5	104175-09	One Leg (Metallic Green) (4 Total Per Stove)	1
	104175-10	One Leg (Metallic Black) (4 Total Per Stove)	1
	104175-11	One Leg (Porcelain Enamel Black) (4 Total Per Stove)	1
	104175-13	One Leg (Porcelain Enamel Almond) (4 Total Per Stove)	1
	104175-14	One Leg (Porcelain Enamel Green) (4 Total Per Stove)	1
	104175-15	One Leg (Porcelain Enamel Red) (4 Total Per Stove)	1
6	104176-01	Leg Leveler bolt M8 x 1.25-55mm Long (4 Total Per Stove)	1
7	104177-02	Hardware	1
7-1	*	Door Hinge Step Bolt With Shoulder (1 Per Unit)	1
7-2	*	Door Catch Bolt M8 x 1.25-55mm Long With Two M8 Hex Nuts (1 Per Unit)	1
7-3	*	Bottom Floor Bolts M6 x 1-25mm Long with Flat Washer and Lock Washer (4 per unit) (Optional on some models)	—
7-4	*	Leg Bolts M6 x 1.25mm Long With Flat Washer And Lock Washer (4 Per Unit)	1
8	104178-01	Back Panel Bolts M6 x 1.20mm Long With Flat Washer And Lock Washer (6 Installed Per Unit)	1
9L	104179-09	Double Door (Left) (Metallic Green)	1
9L	104179-10	Double Door (Left) (Metallic Black)	1
9L	104179-11	Double Door (Left) (Porcelain Enamel Black)	1
9L	104179-13	Double Door (Left) (Porcelain Enamel Almond)	1
9L	104179-14	Double Door (Left) (Porcelain Enamel Green)	1
9L	104179-15	Double Door (Left) (Porcelain Enamel Red)	1
9L	104180-09	Double Door (Right) (Metallic Green)	1
9R	104180-10	Double Door (Right) (Metallic Black)	1
9R	104180-11	Double Door (Right) (Porcelain Enamel Black)	1
9R	104180-13	Double Door (Right) (Porcelain Enamel Almond)	1
9R	104180-14	Double Door (Right) (Porcelain Enamel Green)	1
9R	104180-15	Double Door (Right) (Porcelain Enamel Red)	1
10	104181-01	Double Door Hinge (2 Per Side/4 Per Unit)	1
11	104181-02	Double Door Hinge Pins (2 Per Side/4 Per Unit)	1

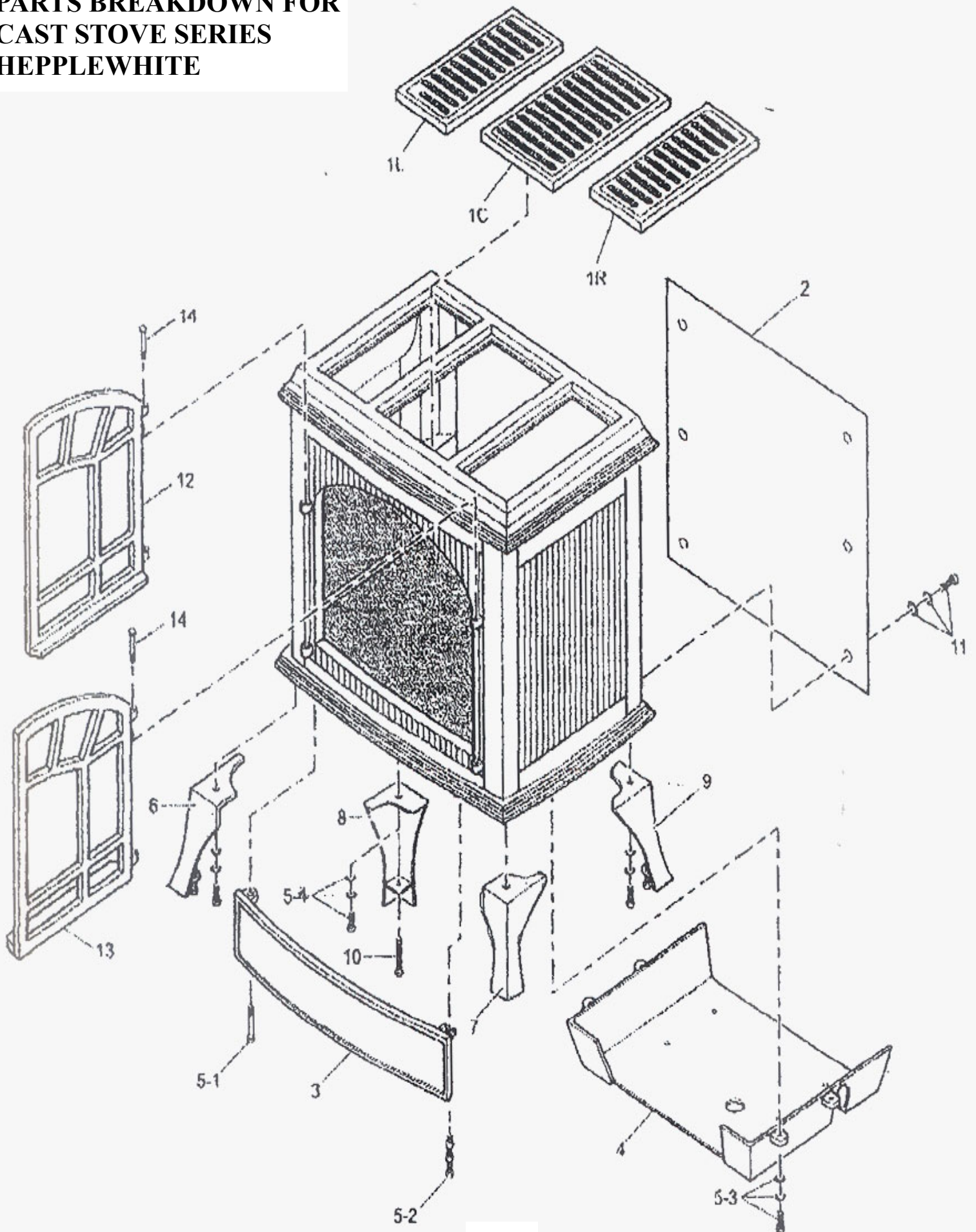
**PARTS AVAILABLE-NOT SHOW
TOWNSEND II**

PART NO.	DESCRIPTION	QTY.
104108-05	Touch-up Spray Paint 12 oz. Can (Metallic Green)	1
104108-09	Touch-up Spray Paint 12 oz. Can (Metallic Black)	1
104107-04	Touch-up Spray Paint with Brush (Porcelain Enamel Black)	1
104107-06	Touch-up Spray Paint with Brush (Porcelain Enamel Almond)	1
104107-07	Touch-up Spray Paint with Brush (Porcelain Enamel Green)	1
104107-08	Touch-up Spray Paint with Brush (Porcelain Enamel Red)	1
106057-03	Back Panel Extension, Left (Included)	1
106057-04	Back Panel Extension, Right (Included)	1

**REPLACEMENT PARTS
OPTIONAL BLOWER ASSEMBLY
(MA CVF714)**

PART NO.	DESCRIPTION	QTY.
PH 101612TEK	#10-16 x 1/2" Self tapping Screws (For Mounting Blower Assembly To Fire Box)	4
PE A2-40-01	1/2 Pint Motor	1
PE 400132	Thermostat	1
PE 400240	Power Cord	1
PE 400320	Strain Relief	1
PE RA911VB	ON/OFF Switch	1

PARTS BREAKDOWN FOR CAST STOVE SERIES HEPPLEWHITE



PARTS LIST

HEPPLEWHITE

KEY NO.	PART NO.	DESCRIPTION	QTY.
1C	104171-13	Top Grate with Screen (Center) (Black only)	1
1L	104171-14	Top Grate with Screen (Left) (Black only)	1
1R	104171-15	Top Grate with Screen (Right) (Black only)	1
2	104172-03	Stove Back Panel (Black only)	1
3	104173-16	Bottom Control Door (Metallic Black)	1
	104173-17	Bottom Control Door (Porcelain Enamel Black)	1
	104173-19	Bottom Control Door (Porcelain Enamel Almond)	1
	104173-20	Bottom Control Door (Porcelain Enamel Green)	1
	104173-21	Bottom Control Door (Porcelain Enamel Red)	1
	104173-22	Bottom Control Door (Metallic Green)	1
4	104174-05	Stove Dropped Bottom (Not Included) (Black only)	
5	104177-02	Hardware Kit	1
5-1	*	Door Hinge Step Bolt with Shoulder (1 per unit)	
5-2	*	Door Catch Bolt M8 x 1.25 –55mm Long with Flat Washer and Lock Washer M8 Hex Nuts (1 per unit)	
5-3	*	Bottom Floor Bolts M6 x 1-25mm Long with Flat Washer and Lock Washer (4per unit)	
5-4	*	Leg Bolts M6 x 1.25-20mm Long with Flat Washer and Lock Washer (4 per unit)	
6	104175-16	Left Front Leg (Metallic Black)	1
	104175-17	Left Front Leg (Porcelain Enamel Black)	1
	104175-19	Left Front Leg (Porcelain Enamel Almond)	1
	104175-20	Left Front Leg (Porcelain Enamel Green)	1
	104175-21	Left Front Leg (Porcelain Enamel Red)	1
	104175-22	Left Front Leg (Metallic Green)	1
7	104175-23	Right Front Leg (Metallic Black)	1
	104175-24	Right Front Leg (Porcelain Enamel Black)	1
	104175-26	Right Front Leg (Porcelain Enamel Almond)	1
	104175-27	Right Front Leg (Porcelain Enamel Green)	1
	104175-28	Right Front Leg (Porcelain Enamel Red)	1
	104175-29	Right Front Leg (Metallic Green)	1
8	104175-30	Left Rear Leg (Metallic Black)	1
	104175-31	Left Rear Leg (Porcelain Enamel Black)	1
	104175-33	Left Rear Leg (Porcelain Enamel Almond)	1
	104175-34	Left Rear Leg (Porcelain Enamel Green)	1
	104175-35	Left Rear Leg (Porcelain Enamel Red)	1
	104175-36	Left Rear Leg (Metallic Green)	1
9	104175-37	Right Rear Leg (Metallic Black)	1
	104175-38	Right Rear Leg (Porcelain Enamel Black)	1
	104175-40	Right Rear Leg (Porcelain Enamel Almond)	1
	104175-41	Right Rear Leg (Porcelain Enamel Green)	1
	104175-42	Right Rear Leg (Porcelain Enamel Red)	1
	104175-43	Right Rear Leg (Metallic Green)	1

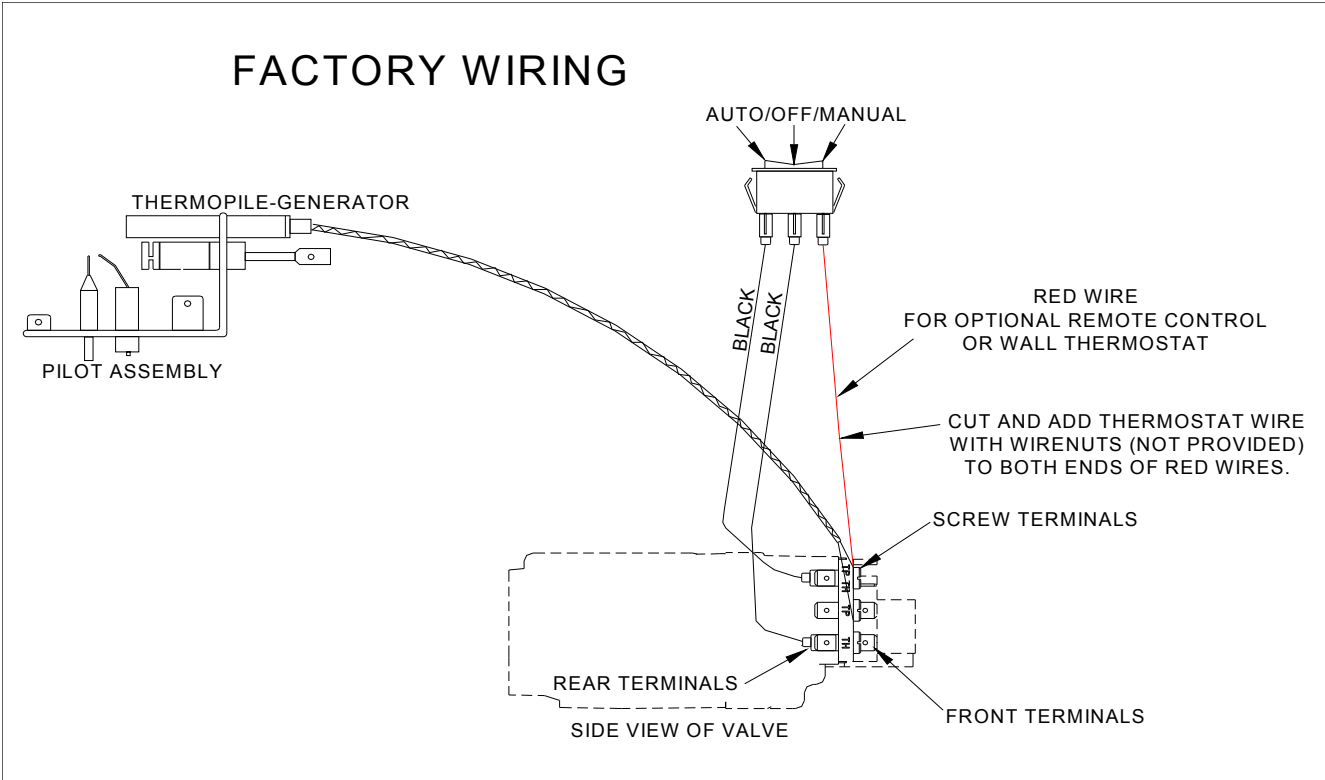
PARTS LIST HEPPLEWHITE

KEY NO.	PART NO.	DESCRIPTION	QTY
10	104176-01	Leg Leveler Bolt M8 x 1.25-55mm Long (4 Total Per Stove)	1
11	104178-01	Back Panel Bolts M6 x 1-20mm Long with Flat Washer and Lock Washer (6 per unit)	1
12	107528-01	Left Door (Metallic Black)	1
	107528-03	Left Door (Porcelain Enamel Black)	1
	107528-07	Left Door (Porcelain Enamel Almond)	1
	107528-09	Left Door (Porcelain Enamel Green)	1
	107528-11	Left Door (Porcelain Enamel Red)	1
	107528-13	Left Door (Metallic Green)	1
13	107528-02	Right Door (Metallic Black)	1
	107528-04	Right Door (Porcelain Enamel Black)	1
	107528-08	Right Door (Porcelain Enamel Almond)	1
	107528-10	Right Door (Porcelain Enamel Green)	1
	107528-12	Right Door (Porcelain Enamel Red)	1
	107528-14	Right Door (Metallic Green)	1
14	107527-01	Stainless Upper Door Hinge Bolt with Shoulder (4 per stove)	1

PARTS AVAILABLE-NOT SHOWN HEPPLEWHITE

PART NO.	DESCRIPTION	QTY.
104108-05	Touch-up Spray Paint 12oz. Can (Metallic Green)	1
104108-09	Touch-up Spray Paint 12oz. Can (Metallic Black)	1
104107-04	Touch-up Spray Paint with Brush (Porcelain Enamel Black)	1
104107-06	Touch-up Spray Paint with Brush (Porcelain Enamel Almond)	1
104107-07	Touch-up Spray Paint with Brush (Porcelain Enamel Green)	1
104107-08	Touch-up Spray paint with Brush (Porcelain Enamel Red)	1
106057-01	Back Panel Extension, Left (Included)	1
106057-02	Back Panel Extension, Right (Included)	1

WIRING DIAGRAM



LIMITED WARRANTY VENT-FREE NATURAL OR L.P. (LIQUID PROPANE) GAS LOG HEATERS AND STOVE CHASSIS

WARRANTY INFORMATION

New Buck Corporation warrants this product to be free from defects in materials and components for four (4) years from the date of first purchase provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or Cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a New Buck Corp. dealer. Warranty part (s) MUST be obtained through authorized dealers of this product and / or New Buck Corp. who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

For a period of one (1) year from the date of purchase, New Buck Corp. will replace or repair at its option: electrical motor, wiring, switches and optional accessories.

TO THE FULL EXTENT ALLOWED BY LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT: THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS FROM THE DATE OF PURCHASE: AND NEW BUCK CORPORATION LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND NEW BUCK CORPORATION SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For information about this warranty write:

**NEW BUCK
CORPORATION**
P.O. BOX 69
SPRUCE PINE, NC 28777

www.buckstovecorp.com

