MODEL 384 MAY BE INSTALLED IN A SOLID FUEL BURNING FIREPLACE, AS A FREESTANDING FIREPLACE, AS A ZERO CLEARANCE FIREPLACE OR WITH AN OPTIONAL WOODEN SURROUND



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.

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 section "Producing Adequate Ventilation" page 31.

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

INSTALLER: Leave this manual with the appliance.

CONSUMER: Retain this manual for future reference.

Manufacturer: NEW BUCK CORPORATION P.O. Box 69 8000 Highway 226 South Spruce Pine, NC 28777

"This appliance is intended for supplemental heating".

Revised December 2006

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SECTION I

SAFETY INFORMATION WARNINGS

IMPORTANT: READ THIS OWNER'S MANUAL CAREFULLY AND COMPLETELY BEFORE TRYING TO ASSEMBLE, OPERATE, OR SERVICE THE APPLIANCE. IMPROPER USE OF THESE LOGS CAN CAUSE SERIOUS INJURY OR DEATH FROM BURNS, FIRE, EXPLOSION, AND CARBON MONOXIDE POISONING.

Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, and/or nausea. If you have these signs, the heater may not be working properly. <u>Get fresh air at once!</u> <u>Have heater serviced.</u>

Some people-pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, and those at high altitudes-are more affected by carbon monoxide than others.

CAUTION: Strong drafts, such as a ceiling fan placed directly in front of the heater (pulling from either direction) may create sooting. Sooting will discolor walls.

- 1. The installation must conform with local codes, or in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA54*.
- 2. This appliance may be installed in an After-Market^{*} Manufactured (Mobile) Home, where not prohibited by state or local codes.

(After-Market: Completion of sale, not for purpose of resale from the manufacturer.)

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.

NOTE: See Section VIII, "Producing Adequate Ventilation" page 30.

IMPORTANT: VENT-FREE HEATERS ADD MOISTURE TO THE AIR. ALTHOUGH THIS IS BENEFICIAL, INSTALLING HEATER IN ROOMS WITHOUT ADEQUATE VENTILATION MAY CAUSE MILDEW TO FORM FROM TOO MUCH MOISTURE.

- 3. Never install this heater:
- in a recreational vehicle, bathroom, bedroom, or any other sleeping quarters
- where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater
- in high traffic areas or in windy areas
- 4. Two models are available. One specific model for propane (LP), and one for natural gas. Use the correct type gas for your home. Do not convert from one gas type to another.

"WARNING: ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS."

5. If this heater is used with propane gas, do not place propane supply tank (s) inside any structure.

6. What To Do 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.
- 7. 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. Run the gas logs with the flue damper open during this time. Do not use blower at this time.
- 8. "This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air." See "Producing Adequate Ventilation", page 31.
- 9. Surface of gas logs becomes very hot when operating. Keep children and adults away from hot surface. Gas logs will remain hot for sometime after shutdown. Allow surface to cool before touching.

10. Do not place clothing or other flammable material on or near the appliance.

- 11. If equipped, fresh air damper must be closed.
- 12. Keep appliance area clean and free from combustible materials, gasoline, and other flammable vapors and liquids.
- 13. If burner shuts off, do not relight until you provide fresh outside air. If burner continues to shut off, have unit serviced.
- 14. Do not use this heater if any part has been under water. Immediately call 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.
- 15. Turn off the heater and let cool before servicing.
- 16. These logs are made of bonded fiber. When removing logs and base, do not damage the bonded material. If the material is damaged extensively, loose fiber dust could be emitted into the air.
- 17. Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.
- 18. "WARNING: Any change to this heater or its controls can be dangerous."
- 19. Installation and repairs should be performed 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, pet hair, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

- 20. All heater screens must be kept closed when operating the gas logs.
- 21. "WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage."
- 22. Do not use this heater for burning trash or cooking. Never place matches, paper, garbage, or any other material on top of logs or into the flames.
- 23. Do not install or operate this heater in areas where impurities in the air exist (such as tobacco smoke or heavy cooking grease). Particles from impurities may discolor walls.
- 24. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- 25. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- 26. Young children should be carefully supervised when they are in the same room with the appliance.
- 27. An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom or bathroom.
- 28. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psi (3.5 kPa).
- 29. The appliance must be isolated from the gas supply piping system by closing its equipment shut-off 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).
- 30. "WARNING: Do not allow fans to blow directly into fireplace. Avoid any drafts that alter burner flame patterns."
- 31. "WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater."
- 32. This appliance is intended for supplemental heating.

SECTION II

FIREPLACE PREPARATION

The fireplace needs to be prepared before installing the heater.

A. Turn off the gas supply to the fireplace.

WARNING: BEFORE INSTALLING IN A SOLID-FUEL BURNING FIREPLACE, THE CHIMNEY FLUE AND FIREBOX MUST BE CLEANED OF SOOT, CREOSOTE, ASHES, AND LOOSE PAINT BY A QUALIFIED CHIMNEY CLEANER.

"WARNING: DO NOT ALLOW FANS TO BLOW DIRECTLY INTO THE FIREPLACE. AVOID DRAFTS THAT ALTER BURNER FLAME PATTERNS."

"WARNING: DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT OR OTHER ACCESSORIES NOT APPROVED FOR USE WITH THIS HEATER."

WARNING: ANY OUTSIDE AIR DUCTS AND/OR ASH DUMPS IN THE FIREPLACE SHALL BE PERMANENTLY CLOSED AT TIME OF APPLIANCE INSTALLATION.

B. Read the following sections before installing your unit; Section III, page 20 Installation In A Solid-Fuel Burning Fireplace and Section VIII, page 31 Producing Adequate Ventilation.

WARNING: CUTTING ANY SHEET-METAL PARTS OF THE SOLID–FUEL BURNING FIREPLACE OR LISTED VENTLESS FIREBOX ENCLOSURE IN WHICH THE UNVENTED FIREPLACE INSERT IS TO BE INSTALLED IS PROHIBITED.

NOTE: "IF THE FACTORY BUILT FIREPLACE HAS NO GAS ACCESS HOLE(S) PROVIDED, AN ACCESS HOLE OF 1.5 inch (37.5mm) DIAMETER OR LESS MAY BE DRILLED THROUGH THE LOWER SIDES OR BOTTOM OF THE FIREBOX IN A PROPER WORKMANLIKE MANNER. THIS ACCESS HOLE MUST BE PLUGGED WITH NON-COMBUSTIBLE INSULATION AFTER THE GAS SUPPLY LINE HAS BEEN INSTALLED."

REFRACTORY, GLASS DOORS, SCREEN RAILS, SCREEN MESH AND SOLID-FUEL LOG GRATES (IF APPLICABLE) CAN BE REMOVED FROM THE FIREPLACE BEFORE INSTALLING THE UNVENTED FIREPLACE INSERT.

INSTALLATION AND CLEARANCES



(1) Sidewall Clearances:

Clearance from the side of the fireplace opening to any adjacent combustible wall should not be less than: right side 7", left side 7".

(2) Ceiling Clearances:

The ceiling height should not be less than 26" from the top of the fireplace opening. (3) Mantel Clearances:

Clearances from top of heater to mantel or mantel supports should not be less than 20".

NOTE: See the following sections for installation options: Section III, page 20, Installation In A Solid-Fuel Burning Fireplace, and Section IV, page 22, Installation With Optional Wooden Mantel, and Section V, page 24, Zero Clearance Installation.

WARNING: ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.

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" N.P.T. made at the left rear (facing the front of the appliance) of the appliance.

NOTE: The connecting pipe must be internally tinned copper tubing for use with natural gas. Test for leaks using a solution of soap and water after completing the connection. **DO NOT USE OPEN FLAME.**

NOTE: "If the factory-built fireplace has no gas access hole(s) provided, an access hole of 1.5 inch (37.5mm) diameter or less may be drilled through the lower sides or bottom of the fire box in a proper workmanlike manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed."

WARNING: Installation and repairs should be performed 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, pet hair, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.



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.

WARNING: POSITIONING OF LOGS IS VERY CRITICAL (SEE DIAGRAM ABOVE).

- (1) Front Log(s) #1-R and 1-L (Slim Log(s) wrapped in cardboard box). Place the 1-R between the front portion of the burner and log grates on the right hand side of the log base. Next place 1-L between the front portion of the burner and log grates. **Note:** logs 1-R and 1-L should over lap in the center of the burner base to create the front log.
- (2) Middle Glow Log #2. Place rear of log on top of middle log supports located in open center portion of burner base. Front of log should rest slightly behind the rear line of burner holes on the front portion of the burner. Align the notch on the left front bottom side of the log over the existing hold down nut of the burner. This should align the log at the right position from left or right on the burner.
- (3) Rear Log #3. Place log in rear log supports. Center from left to right.
- (4) Left Top Log #4. Log has two (2) holes in the bottom front side. Align the holes with the two (2) pins located on the left top of log #2. Rear of log #4 should rest on the left top end of the rear log #3.

EMBER STOVE LOG SET PLACEMENT FOR MODEL 384

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.

WARNING: POSITIONING OF LOGS IS VERY CRITICAL (SEE DIAGRAM ABOVE).

MODEL E.S.B: 1)Rear Log, 2)Middle Log, 3)Left Top Middle Log, 4)Right Top Middle Log 5)Left Front Log 6)Right Front Log 7)Glowing Embers in front of 5 & 6 logs. WARNING: POSITIONING OF LOGS IS VERY CRITICAL (See Figure 2).

1) Place rear log #1 on rear log supports. The log has alignment notches on each rear corner.

2) Place Middle $\log \#2$ in front of the rear burner tube and then move the log forward. The log should seat just behind the brass knob(s), located in the middle section of the base between the rear burner tube and the front burner pan.

- 3) Place Left Top Middle $\log \#3$ on the pins located on the left top section of Middle $\log \#2$.
- 4) Place Right Top Middle log #4 on the pin located on the right top section of Middle log #2 and a line the notch on the right side #4 with the side shield on the right.
- 5) Place Left Front log #5 on the locator pins located on the left middle section of the front burner pan.
- 6) Place Right Front log #6 on the locator pins located on the right middle section of the front burner pan.
- 7) Provided with your log set is a package of Glowing Embers (rock wool). Open the package and tare off small pieces of the wool material and place it over the small holes (ports) located on the front burner pan in front of logs #5 and #6. Cover the entire section of holes (ports).
 *Replacement of loose (Glowing Embers) must be purchased from the original manufacturer and application of excess loose material may adversely affect performance of the heater.

NOTE: "Wash your hands immediately after coming in contact with the wool material. The wool can cause slight itching or burning in some cases, avoid any contact with eyes."

"WARNING: All previously applied loose material must be removed prior to replacement."

GAS PRESSURE CHECK

Check the inlet pressure to the burner to ensure that it is as shown in the table below.

NOTE: The pressure check point is located on the right side of the valve facing burner, for SIT Millivolt, and the left side for SIT Modulating.

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

The appliance must be isolated from the gas supply piping system by closing its equipment shut -off 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).

VALVE	(SIT MILLIVOIT)		(SIT MANUAL-MODULATING)	
MODEL:	FP384	FP384	FP384	FP384
<u>GAS</u>	<u>Natural</u>	Propane	<u>Natural</u>	Propane
Maximum Heat Input	33,000	33,000	33,000	33,000
Minimum Heat Input	23,000	23,000	12,000	13,000
Gas Inlet Pressure				
Maximum	10.5ins.W.C.	13ins.W.C.	10.5ins.W.C.	9.0ins.W.C.
Minimum	* 5.0ins.W.C.	*11ins.W.C.	*5.0ins.W.C.	*11ins.W.C.
Manifold Pressure				
Maximum	3.5ins.W.C.	9.0ins.W.C.	3.5ins.W.C.	9.0ins.W.C.
Minimum	3.0ins.W.C.	8.2ins.W.C.	2.8ins.W.C.	7.2ins.W.C.

NOTE: On initial installation it may be necessary to bleed out air in the gas lines. Do this by holding the control knob and turning the knob to the "PILOT" position for about 30 seconds. To check the regulator pressure, remove the pressure tag plug at the left side of the regulator facing the heater. The pressure should be checked with the heater burning and the control set on high. After measuring the pressure, replace the pressure tap plug, ensuring that there are no leaks.

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* For the purpose of minimum input adjustment.
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WARNING This appliance is equipped for (natural or propane) gas. Field conversion is not permitted.

Solid fuels shall not be burned in the same fireplace where an unvented room heater has been installed.

NOTE: The following label has been provided with this appliance and must be read and then attached to the floor of the fireplace or firebox area beneath the appliance. The label is a peel and stick label. Make sure the area is cleaned before attaching the label to it.

"WARNING: This solid-fuel burning fireplace or listed ventless enclosure has been converted for use with an unvented fireplace insert only. A solid-fuel burning fireplace cannot be used for burning wood or solid fuels unless all original parts have been replaced, and the fireplace re-approved by the authority having jurisdiction. A ventless firebox enclosure cannot be used with an unvented gas log unless all original parts have been replaced, and the ventless firebox enclosure reapproved by the authority having jurisdiction."

LIGHTING INSTRUCTION MODULATING OR MANUAL VALVE (SIT) 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 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 <u>only</u> 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 INSTRUCTION

- 1. **STOP!** Read the safety information on preceding page 9.
- 2. Make sure manual shutoff valve is fully closed.
- 3. Turn off all electrical power to the appliance.
- 4. Open access panel door located at bottom front of the appliance.
- 5. Turn control knob clockwise to the full "OFF" position.



- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" on preceding page in the Safety Information. If you don't smell gas, go to the next step.
- 7. Find Pilot: The pilot is located in front of the rear log and burner on the right hand side of the appliance. Fully open the manual shutoff valve.
- 8. Press in and turn gas control knob counterclockwise to the "PILOT" position. Continue pressing in control knob for fifteen (15) seconds.
- 9. With control knob pressed in, push down (in) and release the ignitor button (ignitor button is located on the left hand side of the gas control valve). This will light pilot. If needed, keep repeating this step until pilot lights.
- 10. Keep control knob pressed in for one (1) minute after lighting pilot. After one (1) minute, release control knob and it will pop back up. Pilot should remain lit. If pilot goes out, repeat steps 1 through 9.
- If the 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 "OFF" and call your services technician or gas supplier."



- 11. Turn gas control knob counterclockwise to "ON" position. Continue to turn the gas control knob counterclockwise to your desired setting.
- 12. Close access panel door.
- 13. Turn on all electrical power to the appliance.

CAUTION

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

TO TURN OFF GAS TO APPLIANCE

SHUTTING OFF UNIT

- 1. Open access cover door.
- 2. Turn gas control knob clockwise to the full "OFF" position.
- **3.** Turn off all electric power to the appliance if service is to be performed
- **4.** Close access cover door.

SHUTTING OFF BURNER ONLY (pilot stays lit)

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.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury, or loss of life. Refer to owner's information manual provided with this appliance. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

IMPORTANT: 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.

THERMOSTAT CONTROL OPERATION

1. The thermostat control on this heater differs from standard thermostats. Standard thermostats simply turn the burner on and off. The thermostat used on this heater senses the room temperature and adjusts the amount of gas flow to the burner. This will increase or decrease the flame height. At times, the room may exceed the set temperature, which will cause the burner to shut off. When room temperature drops below the thermostat setting, the burner will cycle itself on again. The control knob can be set to any level between "LO" and "HI".

NOTE: The thermostat sensing bulb measures the temperature of air near the heater cabinet. This may not always agree with room temperature (depending on housing construction, installation location, room size, open air temperatures, etc.). Frequent use of your heater will allow you to determine your personal comfort levels.

MANUAL LIGHTING PROCEDURE

- 1. If the pilot cannot be lit with the piezo, it can be manually lit with the use of a paper match and a lighter rod.
- 2. Open access panel door located at bottom front of the appliance.
- 3. Place the match in the holder and light. With the left hand, turn the control knob counterclockwise to "PILOT" position. Press in gas control knob for fifteen (15) seconds.
- 4. Use rod to light match and ignite pilot. The pilot is located in front of the rear log and burner on the right hand side of the appliance.
- 5. Continue to hold the control knob for an additional one (1) minute to ensure the pilot is lit.
- 6. Turn control knob counterclockwise to the "ON" position. Push the "ON/ OFF" toggle switch to the "ON" position. The main burner should light.
- 7. Close access panel door.
- 8. Turn on all electrical power to the appliance.

NOTE: This unit may be used with an optional Wall Thermostat. If so, the Wall Thermostat needs to be set at a higher temperature than the room temperature.

OPERATING INSTRUCTIONS

Before operating this appliance, proceed through the following checklist.

- 1. Read and understand these instructions before operating this appliance.
- 2. Check that there are no gas leaks. If you smell gas do not attempt to light this appliance.
- 3. Verify that log placement is correct.

LIGHTING INSTRUCTIONS SIT-MILLIVOLT VALVE 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. If piezo fails, then light the pilot using matches. Refer to the match lighting instructions.

B. **<u>BEFORE LIGHTING</u>** 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 to 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 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 of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS 1. **STOP!** Read the safety information on the reverse side of this label (page 13). 2. Make sure manual shutoff valve is fully closed. If equipped with thermostat, set to the lowest setting. 3. Turn off all electrical power to the appliance. 4. Open access door located at bottom of front of the appliance. 5. Push in gas control knob slightly and turn clockwise to the full "OFF" position. AUTO/OFF/MANUAL HI/LOW CONTROL SWITCH KNOB KNOB REMOTE CONTROL OR AUTO WALL THERMOSTAT OFF MANUAL PIEZO VALVE

NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

- 6. Wait (5) five minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on the reverse side of this label. If you don't smell gas, go to the next step.
- 7. Find Pilot: The pilot is located in front of the rear log and burner on the right hand side of the appliance. Fully open the manual shutoff valve.
- 8. Press in and turn knob on gas control counterclockwise \checkmark to "PILOT" and continue pressing in the knob for (15) fifteen seconds.
- 9. With control knob pressed in push down (in) and release the ignitor button (ignitor button is located on the left hand side of the front of the appliance). This will light the pilot. If needed, keep repeating this step until pilot lights.
- 10. Keep control knob pressed in for (1) one minute after lighting pilot. After (1) minute, release the control knob and it will pop back up. Pilot should remain lit. If pilot goes out, repeat steps 1 through 9.



- 1. If the pilot cannot be lit with the piezo, it can be manually lit with the use of a paper match and a lighter rod.
- 2. Open access panel door located at bottom front of the appliance.
- 3. Place the match in the holder and light. With the left hand, turn the control knob counterclockwise to "PILOT" position. Press in gas control knob for fifteen (15) seconds.
- 4. Use rod to light match and ignite pilot. The pilot is located in front of the rear log and burner on the right hand side of the appliance.
- 5. Continue to hold the control knob for an additional one (1) minute to ensure the pilot is lit.
- 6. Turn control knob counterclockwise to the "ON" position. Push the "ON/ OFF" toggle switch to the "ON" position. The main burner should light.
- 7. Close access panel door.
- 8. Turn on all electrical power to the appliance.

NOTE: This unit may be used with an optional Wall Thermostat. If so, the Wall Thermostat needs to be set at a higher temperature than the room temperature.

FLAME CHECK

A periodic check of the flames should be made. The pilot flame should always be present when the gas logs are in operation.

- **Rear Flames:** The flames at the rear or at either side of the top log should be very similar, yellow in color, and should be about 3" to 4" above the large rear log for natural gas logs and about 6" for propane (LP) gas log sets.
- **Front Flame:** The flame should be 1-1/2" to 2" high and touch the back of front log. This will produce a red glow on this log.

CR 3329 LOG SET







E.B.S. LOG SET





WHEN USED AS A HEATING APPLIANCE HEAT OUTPUT



When used as a ventless heater, the flue damper of a solid-fuel burning non-combustible fireplace must always be closed.

The heat output is controlled by the "ON/OFF" switch or wall thermostat, when using the Millivolt Valve. When using the -SIT Modulating or -SIT Manual Valve the heat output is controlled by the dial with LOW to HIGH settings. The Vent-Free fireplace may be installed where permitted by local, state, and city codes.

In the absence of local codes, the latest edition of the *National Fuel Gas Code (ANSI Z223.1)* must be met.

WIRING DIAGRAM



Figure 5

WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE APPLIANCE

WARNING: DO NOT PLACE CLOTHING OR OTHER FLAMMABLE MATERIAL ON OR NEAR THE APPLIANCE.

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

NOTE: Installation and repair should be done by a qualified service person. This heater should be inspected before use and at least annually by a qualified 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 and circulating air passageways of the heater be kept clean.

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

Verify proper operation after servicing.

WARNING:

ELECTRICAL GROUNDING INSTRUCTION: 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.

- **NOTE:** #PE SBR084 Blower Motor Rating: 120 volts/60HZ/1.1 Amps.
- **NOTE:** For convenience, allow licensed electrician to install properly grounded 3-plug receptacle near unit.

SECTION III INSTALLATION MODEL 384 (FP) IN SOLID FUEL BURNING FIREPLACES

 The Model FP-384 may be installed in a masonry fireplace. The minimum fireplace dimension must be <u>24" high, 32-1/2" wide, and 12" deep.</u> NOTE: Damper or clean out must be closed or sealed off.

(2) Earminimum dimensions for the side

(2) For minimum dimensions for the sidewall and mantel, see drawing below.

(3) Center the heater in fireplace opening.

NOTE: See "Producing Adequate Ventilation" page 31.

NOTE: The installer of this appliance must mechanically (peel and stick) attach the marking supplied with this unvented appliance before installing to the inside of the firebox of the solid-fuel burning fireplace or listed ventless firebox enclosure into which the unvented fireplace insert is installed. See the example of the marking on page 8 of this manual.

CAUTION: Cutting any sheet-metal parts of the solid-fuel burning fireplace or listed ventless enclosure in which the unvented fireplace is to be installed is prohibited.

NOTE: "If the factory-built fireplace has no gas access hole(s) provided, an access hole of 1.5 inch (37.5) diameter or less may be drilled through the lower sides or bottom of the firebox in a proper workmanlike manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed."

"Refractory, glass doors, screen rails, screen mesh and solid-fuel log grates (if applicable) can be removed from the fireplace before installing the unvented fireplace insert."

NOTE: After the unit is positioned in fireplace, mark the trim panels as follows to **Install The Trim Kit:**

A. Set the side panels in place, flat against the fireplace. Mark down the inside edge of the trim panel to make a vertical reference line.



CEILING

B. Set the top (long) trim panel in place on top of unit. The panel should be flat against the outside face of the fireplace, and standing vertically (measuring approximately 12" from the rear of the unit to the front area). Mark along the lower edge of the trim panel with a pencil to make reference line for mounting.

NOTE: If used in installation trim panels or surrounds shall not seal ventilation openings in the fireplace.

Also provide adequate clearances around air openings.

(4) Slide the unit out of the fireplace far enough to work behind the trim panel reference lines with a screw gun.

NOTE: You need to make sure the supply gas line is hooked up at this time. Be sure to check for leaks at the connection using soap and water. **DO NOT USE OPEN FLAME TEST FOR LEAKS**.

(5) With screws provided with fireplace kit, attach both side trim panels. Next, attach top trim panel.

(6) Slide the heater back into the fireplace with the trim panels flat against the face of the fireplace.

(7) After hooking up gas line, checking for leaks, and mounting trim panels slide heater into fireplace.

(8) Place logs on burner base as shown on pages 6-7.

(9) For gas hook-up and pressure tap test, see instruction in Section II.

NOTE: Smoke shelves, shields and baffles may be removed if attached by mechanical fasteners.

WARNING: Solid-Fuels shall not be burned in a fireplace in which an unvented room heater is installed.

CAUTION: Any outside air ducts and/or ash dumps in the fireplace shall be permanently closed at time of appliance installation.

WARNING: Before installing in a solid-fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner.

SECTION IV INSTALLATION OF MODEL 384 (WS) WITH OPTIONAL WOODEN SURROUND (KIT#PAKDM384)

NOTE: See page 20 for clearances.

(1) When choosing the right location for your heater and wooden surround keep the following in mind:

NOTE: Due to high temperatures, this heater should be located out of traffic areas and away from furniture and draperies.

CAUTION: THE INSTALLATION MUST CONFORM TO LOCAL CODES. IN THE ABSENCE OF LOCAL CODES, INSTALLATION MUST CONFORM WITH THE NATIONAL GAS CODES.

NOTE: See Section II for gas hookup and pressure check.

NOTE: See "Producing Adequate Ventilation" page 31.

WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE APPLIANCE. WARNING: DO NOT PLACE CLOTHING OR OTHER FLAMMABLE MATERIAL ON OR

WARNING: DO NOT PLACE CLOTHING OR OTHER FLAMMABLE MATER NEAR THE APPLIANCE.

- (2) Position screen before leaving heater unattended.
- (3) Instructions for assembly of Wooden Surround (Mantel):

TOOLS NEEDED: Medium Phillips screwdriver, tape measure, power drill, and 5/16" socket.

- STEP 1: Lay out all components.
- STEP 2: Assemble end panels A & B to top front rail C.

STEP 3: Stand end panels and top front rail onto hearth.

NOTE: (Position back of end panels with back of hearth centering assembly from each end). Install front screws first, then pull back towards the inside to square the mantel. Install screws through back holes.

STEP 4: The owner must decide at this time if parts D, E, and F are to be wood or green. Beginning with panel E stand chosen color face out on hearth flush against stop block located inside end panel A and attach. Position the left end of top window D on top of E and attach. Slide panel F under the right end of D and attach.

STEP 5: Place a cloth or blanket over the front portions of mantel as not to scar the wooden part of the mantel.

The Manufacturers <u>Trim Kit</u> must be used for <u>Wooden Surround Installation</u>.

1. Set the top (long) trim panel in place on top of unit. The panel should be flat against the outside face of the fireplace, and standing vertically (measuring approximately 12" from the rear of the unit to the front area). Mark along the lower edge of the trim panel with a pencil to make reference line for mounting.

2. Set the side panels in place, flat against the fireplace. Mark down the inside edge of the trim panel to make a vertical reference line.

STEP 6: Slide the unit into the front opening of the mantel so the top metal trim panel and outer sides of the heater meet flush with the surround (mantel) front.

STEP 7: Remove cloth or blanket from underneath stove.

STEP 8: Take the two metal "ell" brackets with the screws provided and anchor the back of the fireplace to the surround (mantel).

STEP 9: Place top on to the surround, flush with the back and equal on each end. Secure both ends and middle with screws.



SECTION V ZERO CLEARANCE INSTALLATION OF MODEL 384 (ZC)

The installation must conform with local codes, or in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA54*.

This appliance may be installed in an After-Market^{*} Manufactured (Mobile) Home, where not prohibited by state or local codes.

* (After Market: Completion of sale, not for the purpose of resale from the manufacturer).

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.

NOTE: See "Producing Adequate Ventilation" page 31.

CHOOSING THE LOCATION FOR YOUR FIREPLACE:

The figure below shows some of the many ways your fireplace may be installed. Consider the traffic pattern in your room and the location of doors and windows. Moving air from ceiling fans, open doors, and hot air grills may cause the flames to soot. If a disturbance is found that affects the flames, it must be eliminated by turning off the ceiling fan, closing the door, or closing or moving the hot air register. A corner location may be best where space is limited.

Your fireplace weighs no more than some of your fine furniture. If the fireplace is located near a load bearing wall, additional supports to the foundation will not be necessary. HEAVY FACINGS, SUCH AS BRICK, STONE, ETC., MAY REQUIRE ADDITIONAL FOUNDATION SUPPORT.

NOTE: If this appliance is installed directly on carpeting, tile or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

The Manufacturers Trim Kit must be used for Zero Clearance Installation.

1. Set the top (long) trim panel in place on top of unit. The panel should be flat against the outside face of the fireplace, and standing vertically (measuring approximately 12" from the rear of the unit to the front area). Mark along the lower edge of the trim panel with a pencil to make reference line for mounting.

2. Set the side panels in place, flat against the fireplace. Mark down the inside edge of the trim panel to make a vertical reference line.

GAS LINE

The gas supply line and electrical supply must be installed before framing in the fireplace by a licensed installer.

DRAFTS

Do not locate the fireplace in high traffic areas or areas exposed to high drafts and winds. Locate the fireplace away from furniture and draperies.



ZERO CLEARANCE STANDOFF(S) ASSEMBLY

NOTE: All Standoff(s) must be attached to the appliance before installing as a Zero Clearance appliance.

"Follow the instructions given in the diagrams below exactly".



FIREPLACE CLEARANCES

The fireplace may be placed directly on a combustible floor, against a combustible wall at marked clearances, or on a raised wooden platform.

If the fireplace is to be installed on a raised wooden platform, the platform must be a continuous level surface. The fireplace must be secured in place so it cannot shift positions. Only the header (see below) may rest on the standoffs on top of the firebox.

When the firebox is installed over carpeting, vinyl tile, or any combustible material other than wood flooring, it must be installed on a metal or wood panel extending its full width and depth. Alternatively, the carpeting, vinyl tile, etc. may be removed beneath the fireplace before installing. COMBUSTIBLE MATERIALS MUST NOT BE INSTALLED OVER OR TOUCH ANY BLACK PAINTED SURFACE. DO NOT BLOCK HEAT CIRCULATING AIR OUTLETS. DOING SO MAY RESULT IN POTENTIAL FIRE HAZARDS.

1. **Sidewall Clearances:** Clearances from the side of the fireplace opening to any adjacent combustible wall should not be less than 7"right side and 7" left side.

2. **Ceiling Clearances:** The ceiling height should not be less than 26" from the top of the fireplace opening.

INSTALLING THE FIREBOX

This list of specific instructions will help you make certain that every installation operation is performed correctly. Complete the installation steps in the sequence shown.

LOCAL BUILDING CODES SHOULD BE CONSULTED IN ALL CASES AS TO THE PARTICULAR REQUIREMENTS CONCERNING THE INSTALLATION OF FACTORY BUILT FIREPLACES. Select the location for the fireplace by taking into consideration the factors previously outlined in the "Choosing the Location."

Framing the Firebox

The width of the framed opening must be 35-17/32". The height of the framed opening must be 25 1/8". For depth of opening see side view of this page.

The entire fireplace can be elevated above the floor to achieve a raised hearth effect. This can be done by adding a small platform to achieve the desired height.

NOTE: The wiring for the blower must be installed during the framing stage. Insulation should be used in the framing on the back, sides, and top.

Install the Firebox

Install the firebox into the framed opening by placing it directly in front of the opening and sliding it into the proper position. Please follow wooden surround instructions.(Also see page 25)

Level the Firebox

Check the level of the firebox on the top edge of the fireplace face. Shim if necessary.



WARNING: Installation and repairs should be performed 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, pet hair, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

FINISHING YOUR FIREPLACE

There is a wide variety of finishing material available for your fireplace from formal wall treatments with marble and mantels, to rustic wood paneling, stone or brick. Noncombustible materials used in this installation such as slate, tile, marble, etc. must be at least 1/2" thick.

IT IS IMPORTANT THAT THE BLACK FACE OF THE FIREPLACE NOT BE COVERED WITH ANY TYPE OF COMBUSTIBLE MATERIAL.

Check to see whether man-made brick and stone are made of non-combustible materials before using them on the face of the fireplace. Some of these products contain combustible materials. Combustible wall coverings such as paneling or wallboard may not overlap the black face of the fireplace. The space between the wall covering and the fireplace should be sealed with a heat resistant material such as rock wool insulation or mortar.

NOTE: An "L" shaped steel lintel must be installed across the top of the firebox opening where facing materials such as brick or stone is used on the face of the firebox. It acts as a support/firestop. It should be attached to the face of the fireplace with screws and sealed to the fireplace with a heat-resistant sealer.

CLEARANCES

To ensure a safe installation, the following must be carefully observed.

1. Sidewall Clearances: Clearances from the side of the fireplace opening to any adjacent combustible wall should not be less than 7".

2. Ceiling Clearances: The ceiling height should not be less than 26" from the top of the fireplace opening.

3. **Mantel Clearances:** Clearance from top of heater to mantel or mantel supports should not be less than 20".

4. **Floor Clearances:** No clearance is required if the appliance is installed per these instructions.



SECTION VI MODEL 384 (FS) FREESTANDING INSTALLATION

(1) Determine the exact position of your gas heater.

NOTE: Due to high temperatures, this heater should be located out of traffic areas and away from furniture and draperies.

NOTE: For safe installation the minimum clearances must be met. See Figure below.



CAUTION: The installation must conform with local codes, or in the absence of local codes, with the *National Fuel Gas Code*, ANSI Z223.1/NFPA54.

NOTE: See page 5 for Gas Connection and Pressure Check.

(2) Make sure you have the right valve for your type of gas. Check label on side of valve. Position logs as shown in Log Placement Section, Pages 6-7. Position screen before leaving heater unattended.

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.

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

WARNING: When the appliance is installed directly on carpeting, tile or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

FREESTANDING PEDESTAL OR LEGS INSTALLATION

- 1. The Model 384 can be mounted as free standing with either a pedestal or Queen Anne legs.
 - A. To mount the pedestal Part No.(FA P14) to the heater lay the heater on its back (use a drop-cloth to protect the back of the heater and the surface of your flooring). Place pedestal against bottom of heater. Center pedestal from left to right and from front to rear. Mark the holes on the angle on the top of the pedestal. Lay the pedestal aside. Drill the marks. Replace the pedestal and secure with the provided screws.
 - B. For legs kit Part No.(FA FS384) place heater on its back. Your heater is equipped with four leg mounting nuts.

Place a leg at each nut and secure leg with the bolts provided.

The legs are equipped with leveling bolts needed for leveling adjustments.



- 2. Stand heater to the upright position. Place heater in the desired location. At this point you may want to secure the pedestal to the floor with screws or an "ell" bracket.
- 3. Hook up gas supply line. Check for leaks with mild soapy water. See page 5 Installation Clearances and Gas Connection.

SECTION VII MODEL 384 ALCOVE INSTALLATION

CAUTION: READ ENTIRE MANUAL BEFORE INSTALLING HEATER.

(1) For clearances, see Figure below. The minimum must be met.

(2) For Installation and Gas Hookup Connection see page 5.

CAUTION: The installation must conform with local codes, or in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA54*.

WARNING: DO NOT USE THIS HEATER IF ANY PART HAS BEEN UN-DER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNI-CIAN TO INSPECT THE ROOM HEATER AND TO REPLACE ANY PART OF THE CONTROL SYSTEM AND GAS CONTROL WHICH HAS BEEN UNDER WATER.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, PER-SONAL INJURY OR LOSS OF LIFE. REFER TO THIS MANUAL.

WARNING: ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS."

*ALL DIMENSIONS ARE MINIMUM TO COMBUSTIBLE WALL





SECTION VIII PRODUCING ADEQUATE VENTILATION

This section is for residential or manufactured (mobile) installation

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

The National Fuel Gas Code, ANSI Z223.1/NFPA 54 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8m³ 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.

"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 Z223.1/NFPA 54, SECTION 5.3 OR APPLICABLE LOCAL CODES."

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 1 perm (6 x 10^{-11} kg per pa-sec-m²) or less with openings gasketed or sealed;

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.

NOTE: SOME AREAS IN THE UNITED STATES HAVE HIGHER REQUIREMENTS FOR CUBIC FEET PER 1000 BTU/ HOUR INPUT. (EX. CINCINNATI, OHIO CODES REQUIRE 70 CUBIC FEET). CHECK YOUR LOCAL CODE BEFORE INSTALLATION.

DETERMINING FRESH-AIR FLOW FOR HEATER LOCATION

DETERMINE IF YOU HAVE A CONFINED OR UNCONFINED SPACE

Use this worksheet to determine if you have confined or unconfined space.

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

Determine the volume of the space (length x width x height). Length x Width x Height = _____ cu.ft.(volume of space)

EXAMPLE: 20 ft.(Length) $\overline{x \ 16 \ ft.(Width) \ x \ 8 \ ft.(ceiling \ Height)} =$

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 .= 51.2 or

51200 (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 40000 BTU/Hr

Vent-free heater + 18000 BTU/Hr

Total = 58000 BTU/Hr

*Does 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: 51200 BTU/Hr (maximum the space can support)

58000 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 33.

B. Vent room directly to the outdoors. See "Ventilation Air From Outdoors", page 34.

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: YOU MUST PROVIDE ADDITIONAL VENTILATION AIR IN A CONFINED SPACE
SECTION IX VENTILATION AIR VENTILATION AIR FROM INSIDE BUILDING

This fresh air would come from an adjoining unconfined space. When venting to an adjoining 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 below.) You can also remove door into adjoining room. (See Option 3 below.)

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.

NOTE: Each opening shall have a minimum free area of 1 square inch per 1000 BTU's per hour of the total input ratings of all gas utilization equipment in the confined space, but not less than 100 square inches.



Ventilation Air From Inside Building



WARNING

THIS APPLIANCE MUST HAVE FRESH AIR FOR PROPER OPERATION. IF NOT, POOR FUEL COMBUSTION COULD RESULT. READ THE FOLLOWING INSTRUCTIONS TO ENSURE PROPER FRESH AIR FOR THIS AND OTHER FUEL-BURNING APPLIANCES IN YOUR HOME.

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. 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 air into attic if attic has a thermostatcontrolled power vent. Heated air entering the attic will activate the power unit.



Ventilation Air From Outdoors

SECTION XI

AFTER MARKET MOBILE HOME INSTALLATION

NOTE: See "Producing Adequate Ventilation" page 31. **THIS APPLIANCE MAY BE INSTALLED IN AN AFTERMARKET*, PERMANENTLY LOCATED, MANUFACTURED (MOBILE) HOME, WHERE NOT PROHIBITED BY LOCAL CODES.**

*After Market: Completion of sale, not for the purpose of resale from the manufacturer.

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.

NOTE: For mobile home installation follow "Installation", pages 5-30.

NOTE: See "Producing Adequate Ventilation" page 31.

IMPORTANT SAFEGUARDS



- To avoid irreparable damage to the heater or personal injury, matches, paper, garbage, or any other material **must not** be placed or thrown on top of the logs or into the flames.
- To avoid personal injury, do not touch hot surfaces when the heater is operating.
- Close supervision is necessary when the heater is being operated near children.

WARNING: THE LOGS ARE MANUFACTURED FROM BONDED CERAMIC FIBER. THIS IS A COMMONLY USED MATERIAL IN INDUSTRY WORLDWIDE. IN THE EVENT THAT A LOG SHOULD BE REMOVED, CARE SHOULD BE TAKEN NOT TO DAMAGE THE BONDED MATERIAL. INTENTIONAL MISUSE OR DELIBERATELY FRAGMENTING THE MATERIAL COULD LEAD TO INHALING FIBERS AND BE HAZARDOUS TO YOUR HEALTH.

THIS HEATER IS INTENDED FOR USE AS A GAS HEATER FIREPLACE AS DESCRIBED IN THESE INSTRUCTIONS. IT SHOULD NOT BE USED FOR ANY OTHER PURPOSE.

CLEANING

CAUTION: BEFORE CLEANING OR MOVING THESE LOGS OR OTHER PARTS OF THE HEATER, BE SURE TO READ THE ABOVE SECTIONS ON "IMPORTANT SAFEGUARDS."

The appliance must be turned "OFF" before cleaning inside the firebox (burn area). Make sure the pilot is "OFF" completely and the appliance has cooled.

- All cleaning should be carried out when the heater is cold. Limited cleaning is required with normal use. Dusting the front of the base, the top of the piezo cover, or the control knob panel may be required occasionally. Do not use cleaning fluids to clean the logs or any other part of the heater.
- If the flames show unusual shapes or behavior, or if burner fails to ignite properly, the burner holes may require cleaning. If this occurs, contact your nearest dealer to service the heater.
- The heater can be cleaned by removing the logs. Lift the logs gently, as not to damage the fiber pieces. The logs have been spot glued in place for shipping, use caution when removing. Lift each log by holding it carefully at each end. Use a vacuum cleaner to remove dust and loose particles from the base, logs and around the burner and ODS/Pilot. Gloves are recommended to prevent fibers from breaking the skin. If skin is broken, clean with soap and water.

WARNING: Failure to keep the primary air openings (s) of the burner (s) clean may result in sooting and property damage.

TROUBLESHOOTING

WARNING

TURN OFF, UNPLUG 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	SOLUTION	
Igniter button is pressed No spark at ODS/Pilot	¹ 1. Igniter electrode positioned incorrectly	1. Replace igniter	
	2. Igniter electrode broken	2. Replace igniter	
	3. Igniter electrode not connected to igniter cable	3. Reconnect igniter cable	
	4. Igniter cable pinched or wet	 Free igniter cable if pinched by any metal or tubing. Keep igniter cable dry. 	
	5. Piezo igniter nut is loose	5. Tighten nut holding piezo igniter to heater cabinet. Nut is located inside heater cabinet at top.	
	6. Broken igniter cable	6. Replace igniter cable	
	7. Bad piezo igniter	7. Replace piezo igniter	
OBSERVED PROBLEM	POSSIBLE CAUSE	SOLUTION	
	0.1002		
Igniter button is pressed Spark at ODS/Pilot No Ignition	 Gas supply turned off or manual shutoff valve is closed Control knob not in "PILOT" position Control knob not pressed in while in "PILOT" position 	 Turn on gas supply or open manual shutoff valve Turn control knob to "PILOT" position Press in control knob while in "PILOT" position 	

	 Air in gas lines when installed Depleted gas supply ODS/Pilot is clogged Gas regulator setting is not correct 	 Continue to hold down control knob. Repeat igniting operation until air is removed. Contact local propane gas company Clean ODS/Pilot or replace ODS/Pilot assembly Replace gas regulator
OBSERVED PROBLEM	POSSIBLE PROBLEM	SOLUTION
ODS/PILOT lights but flame goes out when control knob is released	 Control knob is not fully pressed in Control knob not pressed in long enough Safety interlock system has been triggered (if equipped) Manual shutoff valve not fully open Thermo-couple connection loose at control valve. Pilot flame not touching thermo-couple, which allows thermo-couple to cool, causing pilot flame to go out. This problem can be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged ODS/Pilot 	 Press control knob completely After ODS/Pilot lights keep control knob pressed thirty (30) seconds Wait one (1) minute for safety interlock system to reset Fully open manual shutoff valve. Hand tighten until snug, then tighten 1/4 turn A) Contact local propane gas company B) Clean ODS/Pilot (See Cleaning and Maintenance), or replace ODS/Pilot assembly Replace valve control

OBSERVED PROBLEM	POSSIBLE CAUSE	SOLUTION
Burner does not light after ODS/ Pilot is lit	1. Burner orifice is clogged	1. Clean burner (see Cleaning and Maintenance) or replace burner orifice
	2. Inlet gas pressure is too low	2. Contact local propane gas company
Delayed ignition of burner	1. Manifold pressure is too low	 Contact local propane gas company
	2. Burner orifice is clogged	 Clean burner (see Cleaning and Maintenance) or replace burner orifice
Burner backfiring during combustion	 Burner orifice is clogged or damaged 	1. Clean burner (see Cleaning and Maintenance) or replace burner orifice
	 Burner damaged Gas regulator defective 	 Replace burner Replace gas regulator
Slight smoke or odor during initial operation	1. Residues from manufacturing process	1. Problem will stop after a few hours of operation
Heater produces a whistling noise when burner is lit	1. Turning control knob to "HI" position when burner is cold (if equipped with this type of valve)	1. Turn control knob to "LOW" position and allow to warm
	2. Air in gas line	2. Operate burner until air is removed from line. Call local propane company to check gas line.
	3. Air passageways on heater blocked	3. Observe minimum installation clearances
	 Dirty or partially clogged burner orifice 	4. Clean burner or replace orifice

WARNING		
IF YOU SMELL GAS:		
* SHUT OFF GAS SUPPLY		
* DO NOT TRY TO LIGHT 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 the 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	SOLUTION
Heater produces a clinking/ ticking noise just after burner is lit or shut off	1. Metal expands while heating or contracts while cooling	 This is common with most heaters. If noise is excessive, contact a qualified service person.
Heater produces unwanted odors	 Heater burning vapors from paint, hairspray, glues, etc. (See Important above) Low fuel supply Gas leak (See WARNING above) 	 Ventilate room. Stop using odor causing products while heater is running. Refill supply tank Locate and control all leaks. (See Checking Gas Connections)
Heater shuts off in use (ODS operates)	 Not enough fresh air is available Low line pressure ODS/Pilot is partially clogged 	 Open window/door for ventilation Contact local propane co. Clean ODS/Pilot
Gas odor even when control knob is in OFF position	 Gas leak (See WARNING above). Control valve defect 	 Locate and correct all leaks (see Checking Gas Connections) Replace control valve
Gas odor during combustion	 Foreign matter between control valve and burner Gas leak (See WARNING above). 	 Remove foreign matter from gas tubing Locate and correct all leaks (see Checking Gas Connections)

SERVICING

Repair and replacement work should only be performed by a qualified service technician.

Always shut off the gas supply and make sure heater is cool before beginning any service operation. Check for gas leaks after servicing.



A parts list with exploded view follows. Always include correct name, part number, and model number of the heater when ordering service parts. Please contact your local dealer or distributor when ordering . If one is not available, you may contact.

New Buck Corporation P.O. Box 69 Spruce Pine, NC 28777

REPLACEMENT PARTS SIT MODULATING OR MANUAL VALVE

(Picture on page 43)

KEY# PART DESCRIPTION

PART NUMBER

1.	Dilat (NAT) Conrect	PE 2150053 - NAT.
1. 1.	Pilot (NAT.) Copreci	PE 2150053 - NAT. PE 2150054 - LP
1. 2.	Pilot (LP) Copreci Thermoscurle (Copreci)	PE 2130034 - LP PE TPT100 / 90
2. 3a.	Thermocouple (Copreci) Pilot Tube 1/4"	MF 147AL
3b.	Pilot Tube 1/4"	MF 147AL
4.	Burner Tube 3/8"	PO 38812ALMTUB
4. 5.	Pilot Regulator (LP) Maxitrol	PE RV 12LF90
5. 5.	Pilot Regulator (NAT.) Maxitrol	PE RV 12LF30
<i>5</i> . 6.	Burner Tube	PO DTBURN
0. 7.	Orifice Holder	PO 54ORFHLD
8.	Orifice	PO ORIFICE
o. 9.	Valve (LP) SIT (Modulating)	PE 0630504
9. 9.	Valve (NAT.) SIT (Modulating)	PE 0630504 PE 0630504
9. 9A.	Valve (LP) SIT Manual	PE 0630.522
9A.	Valve (NAT) SIT Manual	PE 0630.522
10.	Burner Base	PSNV0000
10. 11.	Valve Regulator (LP) Maxitrol	PE RV20LF90
11. 11.	Valve Regulator (NAT.) Maxitrol	PE RV20LF30 PE RV20LF35
11.	Valve Regulator (IVAT.) Maximur	FERV20LF33
	Black Pipe:	
12.	Brass 90 degree street elbow	PH1166
13.	3/8" x 1-1/2" Nipples (1)	PO 382BINIP
14.	3/8" x 5" Nipples (1)	PO 385BINIP
15.	Brass Pipe Bushing	PH11086
16.	1/2" x 12" Gas Connector	PO 20-2131-12
17.	3/8" Straight to 3/8" Flare Connector	PH 4866
18.	1/8" x 1/4" Compression Adaptor	PH 6842
19.	Gas Ball Valve	PO 110-553
	OTHER DADTS (NOT SHOWAN	
20	OTHER PARTS (NOT SHOWN)	
20.	Blower Motor	PE SBR084
21.	Power Cord	PE 400240
22.	Strain Release	PE 400320
23.	Thermostat	PE 400130
24.	Male Terminals	PE 5X428
25.	Jumper Wire 12"	PE 12JUMPER
26. 27	Gas Log Set	PO CR34LOG
27.	Fan Speed Control Label	PE KB9724
28.	Rheostat	PE BC204
29.	Rheostat Knob	PE BC204A
30.	Heyco 1-1/4" Grommet	PO HEYCO 2883



REPLACEMENT PARTS SIT MILLIVOLT VALVE

Picture on Page 45

KEY#	PART DESCRIPTION	PART NUMBER
1.	820 MV. S.I.T. VALVE	LP-PE 820636
2.	GENERATOR	NAT– PE 820637 (PILOT ASSEMBLY)
3.	BURNER TUBE	PO DTBURN
4.	O.D.S PILOT (L.P.) O.P. ASSEMBLY	PE 8404C
	O.D.S PILOT (NAT.) O.P. ASSEMBLY	PE 8204C
5.	THERMO-COUPLE	(PILOT ASSEMBLY)
6.	2"-3/8" BLACKIRON NIPPLE	PO 382BINIP
7.	BURNER SUPPLY LINE ELBOW	PH4966
8.	21" PILOT TUBE 3/16"	MF 31621ALMTUB
9.	ORIFICE	PO ORIFICE
10.	ORIFICE HOLDER	PO 540RFHLD
11.	3/8" NUT & SLEEVE	PH 616 & PH 606
12.	PIEZO STRIKER	PE 124461
13.	CARLING SWITCH	
	(AUTO/OFF/MANUAL)	PE RC211RB
14.	12" SWITCH WIRES	PE 12JUMPER
15.	12" GENERATOR WIRE	(PILOT ASSEMBLY)
16.	14 3/4" x 3/8" BURNER SUPPLY TUBE	PO 381434ALMTUB
17.	3/8" FIP TO 1/2" MPT PIPE BUSHING	PH 11086
18.	1/2" BALL VALVE WITH PRESSURE TAP	PO 110-553
19.	1/2" FLARE TO 1/2" STRAIGHT	(FLEX LINE ASSEMBLY)
20.	1/2" FLEX LINE	PO 20-213-12
21.	1/2" FLARE TO 3/8" FLARE	PH 4286

OTHER PARTS (NOT SHOWN)

22.	Blower Motor	PE SBR084
23.	Power Cord	PE 400240
24.	Strain Release	PE 400320
25.	Thermostat	PE 400130
26.	Male Terminals	PE 5X428
27.	Jumper Wire 12"	PE 12JUMPER
28.	Gas Log Set	PO CR34LOG
29.	Fan Speed Control Label	PE KB9724
30.	Rheostat	PE BC204
31.	Rheostat Knob	PE BC204A
32.	Heyco 1-1/4" Grommet	PO HEYCO 2883

SIT MILLIVOLT



REPLACEMENT PARTS FOR

EMBER STOVE BASE (ESB) (PICTURE ON PAGE 47) A parts list with exploded view follows. Always include correct name, part number, and model number of the heater when ordering service parts.

KEY#	PART DESCI SIT - MILLIV		PART NUMBER
1.			PE 8404C
1. 1.		O.D.S. PILOT (L.P.) O.P. ASSEMBLY O.D.S. PILOT (NAT) O.P. ASSEMBLY	
1. 2.	GENERATOR ASSEMI		PE 8204C (Part of Pilot Assembly)
2. 3.	PILOT TUBE 3/16"		MF 31612 ALMTUB
3. 4.	GENERATOR WIRE		
4. 5.	REAR BURNER		(Part of Pilot Assembly) PO VE1002
5.	FRONT BURNER		PO VE1002 PO 383436
C			PO 383436 PH 4966
6. 7	INLET ELBOW	EEVE	
7. 8.	3/8" COMP. NUT & SL		PH 616 & PH 606
δ.	3/8" BURNER SUPPLY		DO T(12
0		3 pieces 12"	PO T6-12
9. 10	24" SWITCH WIRES		PE 30JUMPER
10.	CARLING SWITCH	`	
1.1	(AUTO/OFF/MANUAL)	PE RC211RB
11.	PIEZO STRIKER		PE 124461
12.	PIEZO 18" IGNITOR W		PE 8400-014
13.	MALE RUN TEE FITTI	ING	PH 64A-66
14.	THERMO-COUPLE		
15.	MANIFOLD OUTLET	CONNECTOR	PH 68A-6C
16.	ORIFICES <u>L.P.</u>		
	FRONT	#1.25mm	PO 125 MVORF
	REAR	#.046"	PO 046 MVORF
	NATURA		
	FRONT	#2.05mm	PO 205 MVORF
	REAR	#48	PO 48 MVORF
17.	820 mv. S.I.T. VALVE		LP - PE 820-636
			NAT - PE 820-637
18.	8"L 3/8"BURNER SUPPLY I		MF382ALMTUB
	(3/4"-3/8" FLARE/3/8" COMP.	N&S FITTINGS)	

LOG SET

*

EMBER STOVE BASE (CERAMIC)



NEW BUCK CORPORATION

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We offer no other warranty, expressed or implied.

LIMITED WARRANTY VENT-FREE GAS LOG HEATER

New Buck warrants this product to be free from defects in materials and components for two (2) 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 canceled check must be presented.

This warranty is extended only to the original retail purchaser and covers the cost of parts required to restore the heater to proper condition. Warranty parts MUST be obtained through an authorized Buck Stove dealer and/or New Buck, 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.

Warranty does not apply to parts that are not in original condition, 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.

WARRANTY DOES NOT COVER:

- Removal and re-installation cost
- Labor costs for replacements or repairs
- Transportation
- Cost of service call to diagnose trouble
- Painted surfaces
- Damage or defect caused by improper installation, accident, misuse, abuse, or alteration

TO THE FULL EXTENT ALLOWED BY THE 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 WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO ONE (1) YEAR FROM THE DATE OF FIRST PURCHASE. NEW BUCK LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND NEW BUCK SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING 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 on damages may not apply to you.

This warranty gives you specific legal rights. Other rights may vary from state to state.