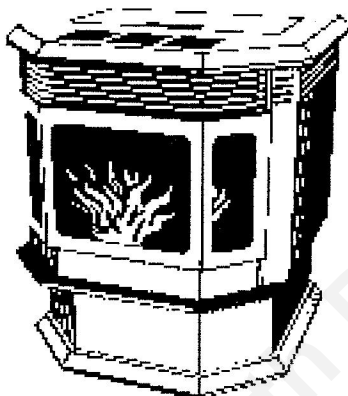


QUADRA-FIRE

North America's Best

MODEL: CLASSIC BAY 1200 PELLET STOVE INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS



CONGRATULATIONS—You are now the proud owner of one of the finest stoves in the world for your home—the **QUADRA-FIRE!** Now before installing your stove and building your first fire, record the serial number on the warranty card. The serial number is located on the safety label on the back wall of the hopper.

PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS PELLET FUEL-BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH.

IMPORTANT SAFETY NOTES

1. When installing your stove, particular attention should be paid to fire protection. If this unit is not properly installed, a house fire may result. For your safety, follow the installation instructions, and contact local building or fire officials about restrictions and installation inspection required in your area.
2. Read power supply section of component information (page 15) before you plug in the stove.
3. Always unplug the stove before cleaning or servicing.
4. During operation, if any part of the stove starts to glow, the stove is in an overfired condition. Reduce the feed rate and increase the amount of air going into the stove. **OVERFIRING VOIDS WARRANTY.**
5. Do not install a flue damper in the exhaust venting system of this unit.
6. Do not connect the stove to a chimney flue already serving another appliance.
7. Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or freshen up a fire in this heater. Keep all such liquids well away from the heater while it is in use.
8. The stove operates with a negative pressure firebox and a positive pressure exhaust. It is imperative that the chimney system be airtight and installed correctly.
9. Dispose of all ashes in a metal container.
10. Comply with all minimum clearances to combustibles as shown on page 4.
11. The Quadra-Fire Classic Bay 1200 is tested and approved for pelleted biomass fuel only. Burning of any other type of fuel voids your warranty!
12. Aladdin Hearth Products, manufacturer of the Classic Bay 1200 pellet stove, reserves the right to alter its products, their specifications and/or price without notice.
13. **ALADDIN HEARTH PRODUCTS, GRANTS NO WARRANTY, IMPLIED OR STATED, FOR THE INSTALLATION OR MAINTENANCE OF THIS UNIT AND ASSUMES NO RESPONSIBILITY FOR ANY CONSEQUENTIAL DAMAGE(S).**

50-3191/812-3590



Revised 07/2000

1445 North Highway
Colville, WA 99114

SAVE THESE INSTRUCTIONS

www.aladdinhearth.com
aladdin@aladdinhearth.com

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SAFETY LABEL

(FOUND ON BACK WALL IN HOPPER)

Model: QUADRA-FIRE 1200	SERIAL NO.
--------------------------------------	-------------------

Room Heater, Pellet Fuel-Burning Type, Also For Use in Mobile
 This pellet-burning appliance has been tested and listed for use in manufactured homes
 in accordance with OAH 814.28 M03 through 814.28.902.

Listed by  Beaverton
 Oregon USA
 OMNI-Test Laboratories, Inc.

Manufactured by

 401 h. Wynn
 Coalinga, WA 90114

Report No. 061-S-21-4 (July 2000)

Install and use only in accordance with manufacturer's installation and operating instructions. Contact local building or fire officials about restrictions and inspection in your area.

WARNING - FOR MOBILE HOMES: Do not install appliance in a sleeping room. An outside combustion air inlet must be provided. The structural integrity of the mobile home floor, ceiling and walls must be maintained.

Components Required for Mobile Home Installation: Part #811-0580 at \$11.0670.

Refer to manufacturer's instructions and local codes for precautions required for passing chimney through a combustible wall or ceiling. Inspect and clean vent system frequently in accordance with manufacturer's instructions.

Do not install a fire damper in the exhaust venting system of this unit. Do not connect this unit to a chimney serving another appliance.

Install vent clearances specified by the vent manufacturer.

Tested To: ASTM E1505-1995
 ULG-6827 MBS

FOR USE WITH ALLUE FLOOR WOOD BURN ONLY.

Input Rating: 5.5 b. 400000

Electrical Rating:
 115 VAC, 60 Hz, 3000 VA Max, 1500 W
 1500 W

Route power cord away from unit.

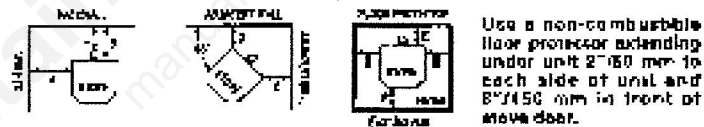
DANGER: Risk of electrical shock. Disconnect power supply before servicing. Replace glass door with 5/8" ceramic available from your dealer.

To start, set thermostat above room temperature. The stove will light automatically. To shut down, set thermostat to below room temperature. For further instructions, refer to owner's manual.

Keep viewing and ash removal doors slightly closed during operation.

Use a 3" or 4" diameter type "UL" or "PL" venting system.

Minimum Clearances to Combustible Materials




Use a non-combustible floor protector extending under unit 2" (50 mm) to each side of unit and 8" (150 mm) in front of stove door.

Ventilation	Chimney & Connector	Dimensions			
		A	B	C	D
Horizontal	3" or 4" Pellet Vent	6 in/147 mm	3 in/75 mm	N/A	3 in/75 mm
Vertical	3" Pellet Vent	6 in/147 mm	N/A	3 in/75 mm	3 in/75 mm
Vertical	Residential - NOTC 1	6 in/147 mm	N/A	3 in/75 mm	3 in/75 mm
Vertical	Mobile Home - NOTB 2	6 in/147 mm	N/A	3 in/75 mm	3 in/75 mm
Vertical	5" Single wall with Vertical Vent Kit	6 in/147 mm	N/A	3 in/75 mm	3 in/75 mm

Note 1: In residential installations, when using part #811-0580 (3" top vent), 24 gauge single wall flue connector may be used.

Note 2: In mobile home installation, when using part #811-0580 (3" top vent), use listed double wall flue connector. An outside air kit (part #811-0580 or #11-0570) must be used with mobile home installation.

U.S. ENVIRONMENTAL PROTECTION AGENCY
 This model is exempt from RFA certification under 40 CFR 60.581 by definition
 [Wood Heater (A) "Air-to-Fuel Ratio"].

Date of Manufacture
 1998 * 2000 Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.


DO NOT REMOVE THIS LABEL Made in U.S.A.

LISTINGS AND SPECIFICATIONS

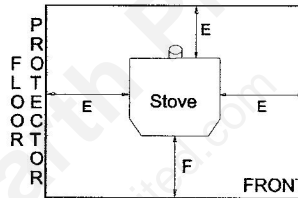
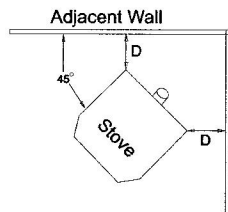
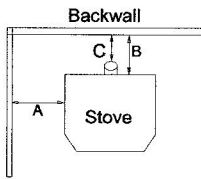
QUADRA-FIRE CLASSIC BAY 1200 pellet stoves are safety listed with OMNI-Test Labs, Inc., Beaverton, OR, to ASTM E 1509 and ULCS627. Also suitable for mobile home installation (see page 11 for details).

HEAT OUTPUT*: 14,000 to 40,000 BTUs per hour
 DIMENSIONS: WIDTH--28½" (724mm), DEPTH--27 ¼" (692mm),
 HEIGHT--31 5/8" (803mm)

*BTU output will vary, depending on the brand of fuel you use in your stove. Consult your Quadra-Fire dealer for best results.

CLEARANCES TO COMBUSTIBLES

Minimum Clearances to Combustible Material (USA in inches, Canada in mm)



Use a noncombustible floor protector extending under unit 2" (50mm) to each side of unit and 6" (152mm) in front of stove door.

E = 2"(50mm)
 F = 6"(150mm)

Installation	Chimney & Connector	Dimensions			
		A	B	C	D
Horizontal	3" or 4" Pellet Vent	6"(152mm)	2"(50mm)	N/A	2"(50mm)
Vertical	3" Pellet Vent	6"(152mm)	N/A	3"(76mm)	2"(50mm)
Vertical	Residential - NOTE 1	6"(152mm)	N/A	3"(76mm)	2"(50mm)
Vertical	Mobile Home - NOTE 2	6"(152mm)	N/A	3"(76mm)	2"(50mm)
Vertical	6" Single Wall with Vertical Vent Kit	6"(152mm)	N/A	3"(76mm)	2"(50mm)

Note 1: In residential installations, when using top flue adapter (part #811-0580), 24 gauge single wall flue connector may be used.

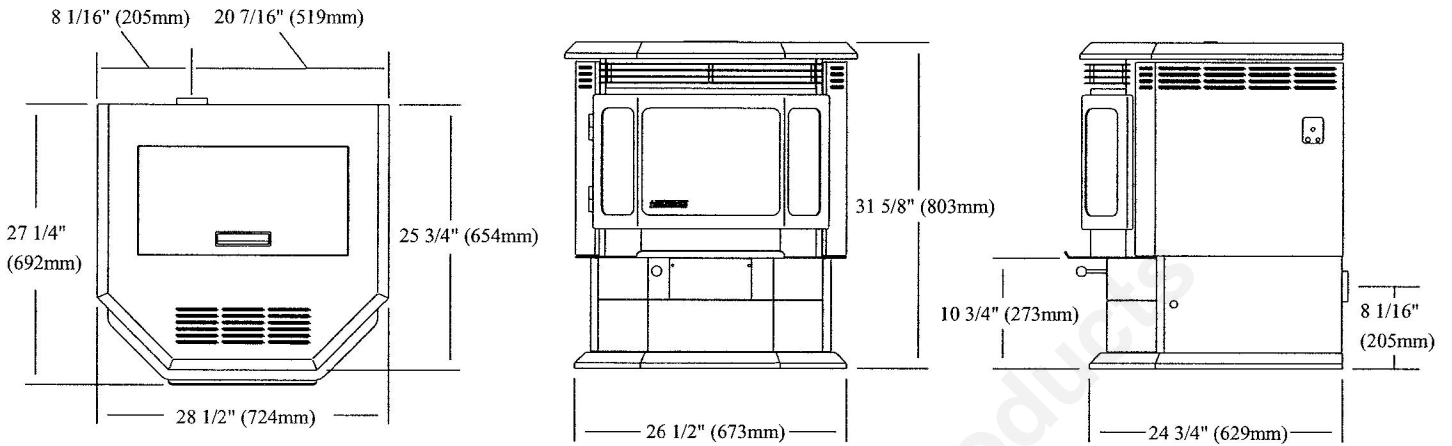
Note 2: In mobile home installations, when using top flue adapter (part #811-0580), use listed double wall flue connector. An outside air kit (part #811-0560, rear, or #811-0570, floor) must be used when installing into a mobile home.

CHIMNEY AND EXHAUST CONNECTION

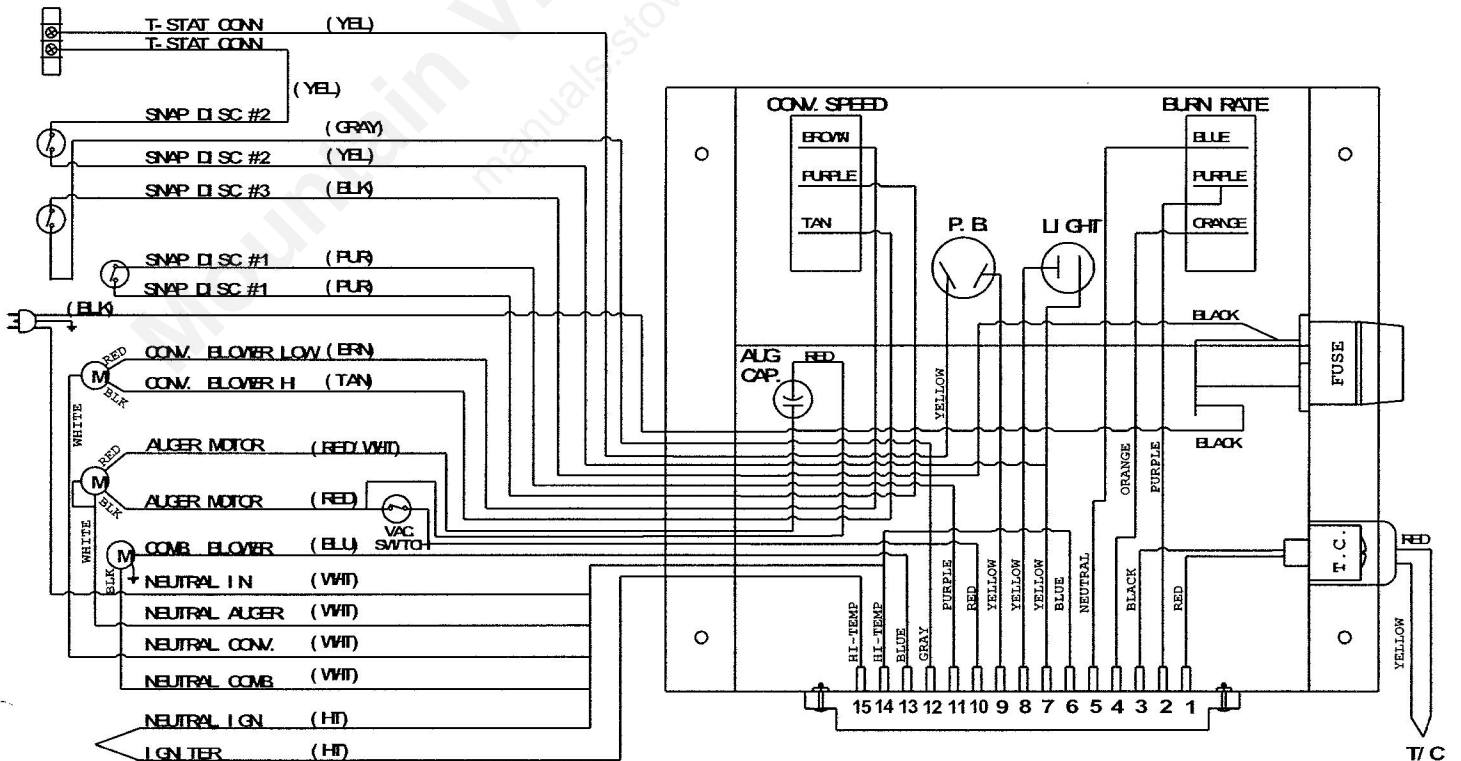
1. CHIMNEY & CONNECTOR: Use 3" (76mm) or 4" (102mm) diameter type "L" or "PL" venting system.
2. MOBILE HOME: Approved for all listed pellet vent. If using the 3" (76mm) vertical top vent kit or 3" (76mm) to 6" (152mm) vertical top vent flue adapter collar, you must use either listed double wall flue connector to Class A pipe, or all Class A pipe. Mobile home venting system must be equipped with a spark arrestor and rain cap.
3. RESIDENTIAL: The 3" (76mm) vertical top vent kit and 3" (76mm) to 6" (152mm) vertical top vent flue adapter collar are tested to use 24 gauge single wall flue connector or listed double wall flue connector to Class A listed metal chimneys, or masonry chimneys meeting ICBO standards for solid fuel appliances.
4. The stove is approved for all 3" (76 mm) or 4" (102 mm) diameter listed pellet vent. It can be either vertically or horizontally vented.
5. Install vent at clearances specified by the vent manufacturer.
6. Be sure to secure exhaust venting system to the stove with at least three set screws. Also secure all connector pipe joints with at least three screws through each joint.

NOTE: All pipe must be sealed using welded seam pipe whenever possible. Seal pipe joints with high temperature silicone (500°F [260°C] minimum rated only).

DIMENSIONS

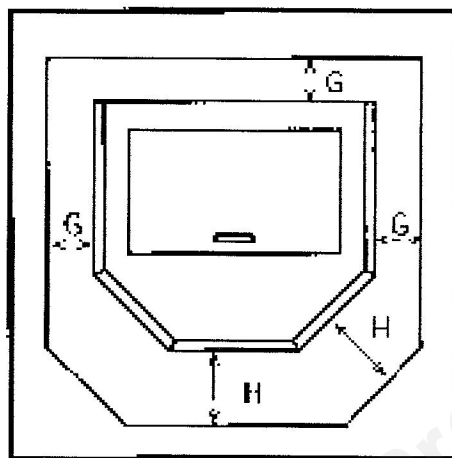


SCHEMATICS WIRING HARNESS



FLOOR PROTECTION

The floor protector must be noncombustible material, extending beneath heater and to the front, sides, and rear as indicated below.



G = 2" (50mm)
H = 6" (152mm)

NOTE: In a corner installation, the floor protection must follow the above clearances.

VENTING TERMINATION REQUIREMENTS

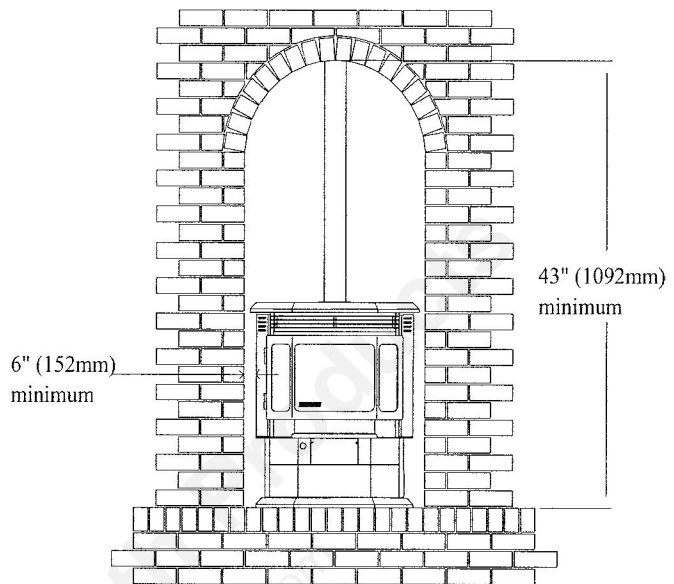
1. Do not terminate vent in any enclosed or semi-enclosed area such as a carport, garage, attic, crawl space, under a sun deck or porch, narrow walkway or closely fenced area, or any location that can build up a concentration of fumes such as a stairwell, covered breezeway, etc.
2. Vent surfaces can get hot enough to cause burns if touched. Noncombustible shielding or guards may be required.
3. Termination must exhaust above air inlet elevation. It is recommended that at least 5' (1.5m) of vertical pipe be installed when appliance is vented directly through a wall. This will create a natural draft, which will help prevent the possibility of smoke or odor venting into the home during appliance shutdown. It will also keep exhaust from causing a nuisance or hazard by exposing people or shrubs to high temperatures. The safest and preferred venting method is to extend the vent vertically through the roof.
4. Venting should terminate not less than 4' (1.2m) below, not less than 4' (1.2m) horizontally from, and not less than 1' (305mm) above doors and windows, or gravity or ventilation air inlets into the building.
5. Distance between bottom of termination and grade should be 12" (305mm) minimum. This is conditional upon plants in the area, and nature of grade surface. The grade surface must be a noncombustible material (i.e., rock, dirt). Distance between bottom of termination and public walkway should be 7' (2.1 m) minimum.
6. Distance to combustible materials should be 2' (510mm) minimum. This includes adjacent buildings, fences, protruding parts of the structure, roof overhang, plants and shrubs, etc.

VENTING SYSTEMS

A. ALCOVE

The Quadra-Fire Classic Bay 1200 is approved for a standard alcove height of 72" (1830mm), and a maximum alcove depth of 60" (1525mm).

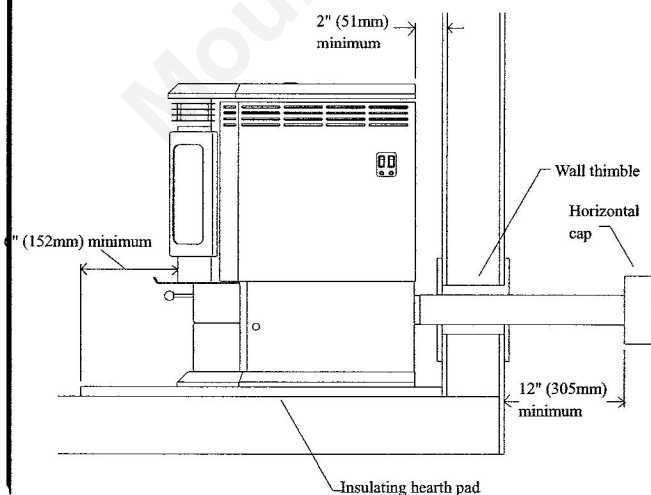
The minimum alcove height is 43" (1090mm) from floor to top of alcove, and a minimum of 12½" (320mm) of clearance from the top of the stove to combustibles. For a reduced alcove, the maximum alcove depth is 36" (915mm). For back and side clearances to combustibles, see page 4.



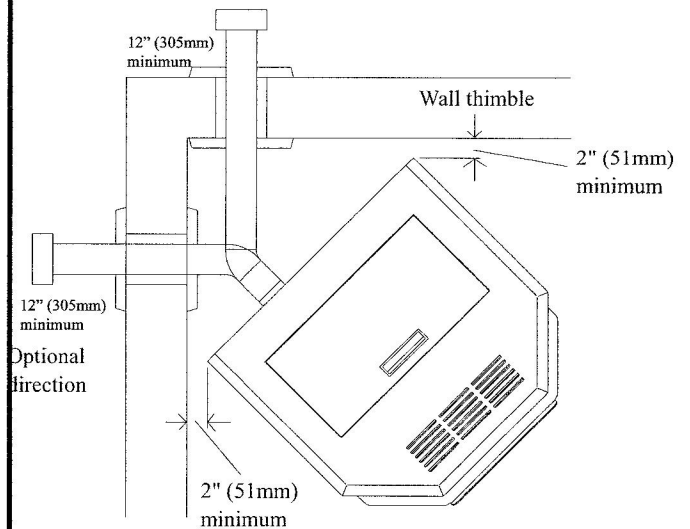
B. THROUGH THE WALL

We recommend going a minimum 5' (1524mm) vertical, but above the eave is preferred. Horizontal termination must be 12" (305mm) from the wall.

Straight Out

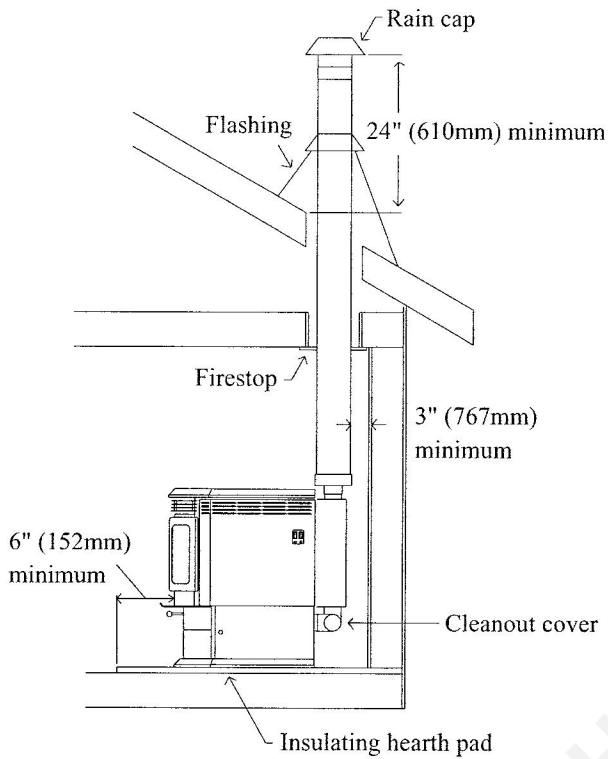


45 Degree

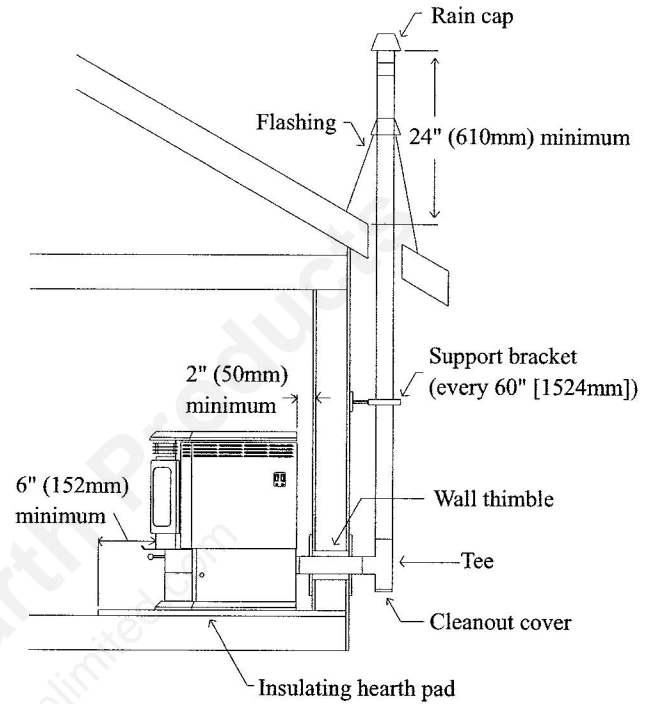


VENTING SYSTEMS (cont.)

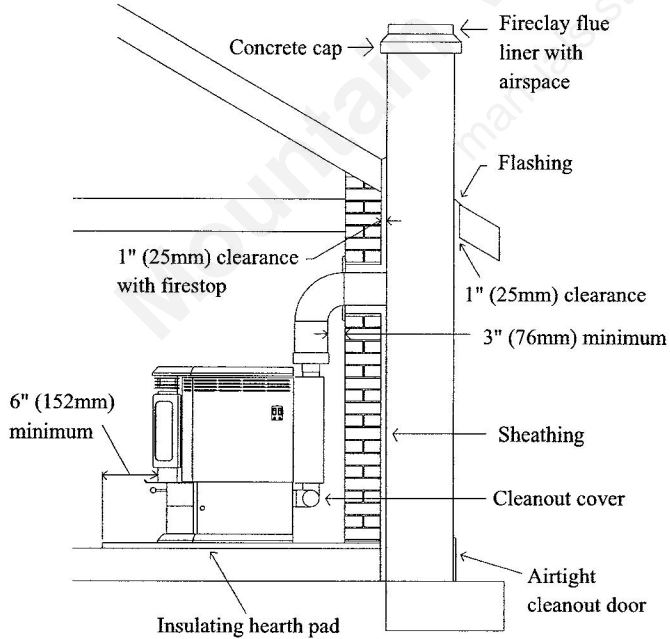
C. VERTICAL



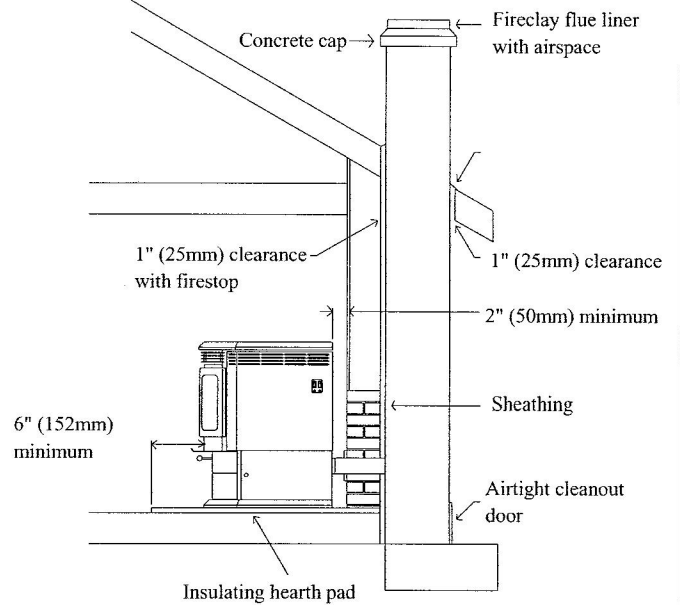
D. THROUGH THE WALL AND VERTICAL



E. MASONRY

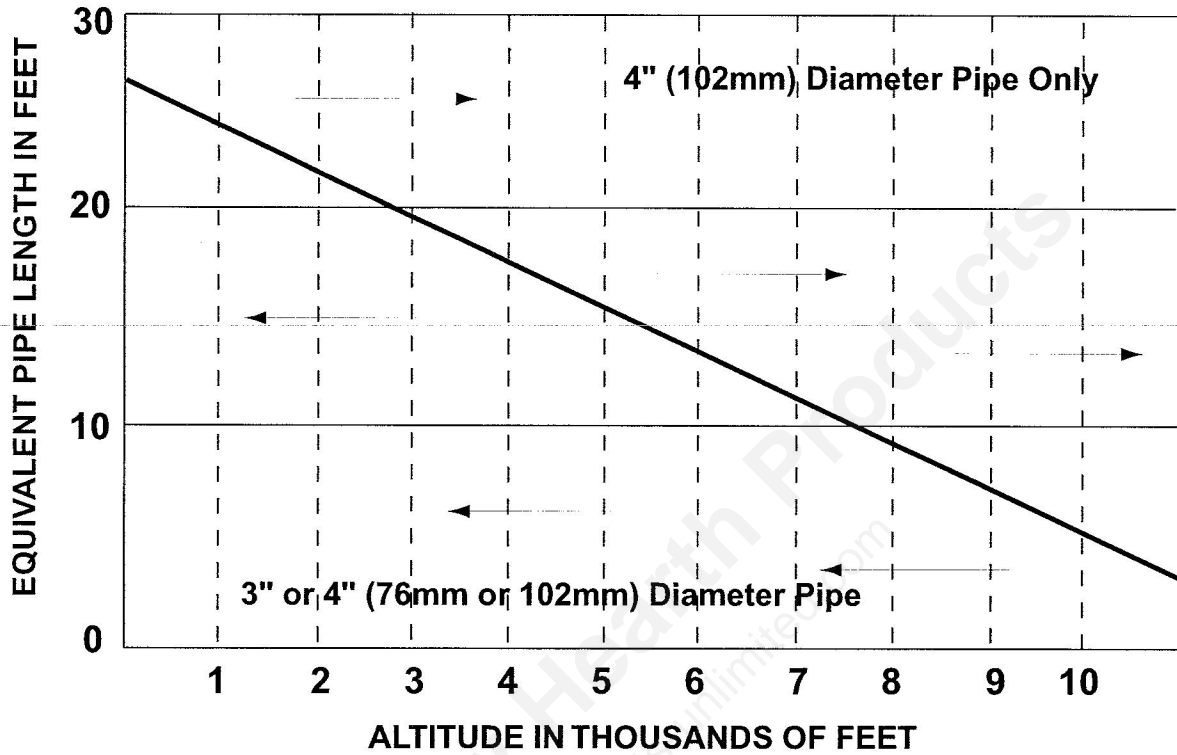


F. ALTERNATE MASONRY



VENTING GRAPH

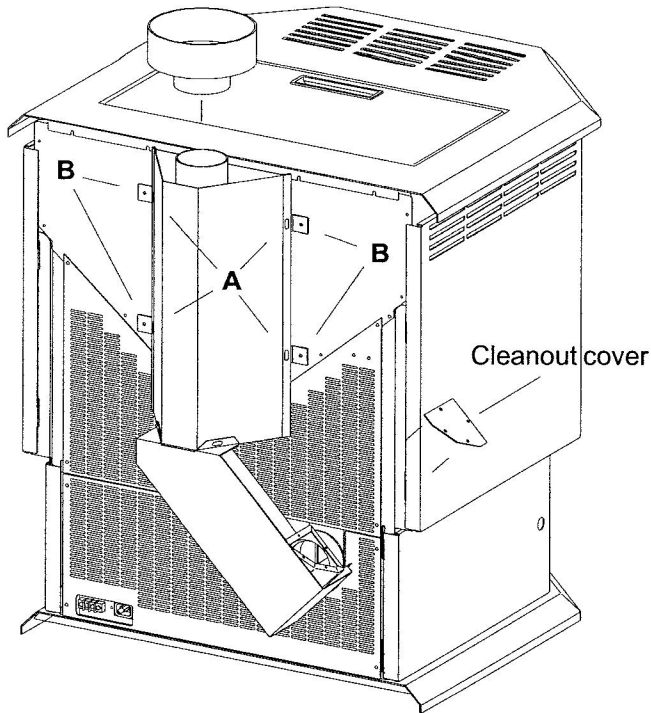
When running vertically with pellet venting, the following chart can be used to determine whether to use 3" or 4" (76mm or 102mm) diameter pipe.



The table below can help you determine the equivalent feet of pipe used for venting when installing a pellet appliance.

Pellet Venting Component	# of Elbows or Feet of Pipe	Multiplied By:	Equivalent Feet	Component Equivalent Feet
		x		
		x		
		x		
		x		
TOTAL EQUIVALENT FEET				

TOP VENT FLUE ADAPTER INSTALLATION



3"-3" ADAPTER #811-0580

3"-6" COLLAR #811-2690

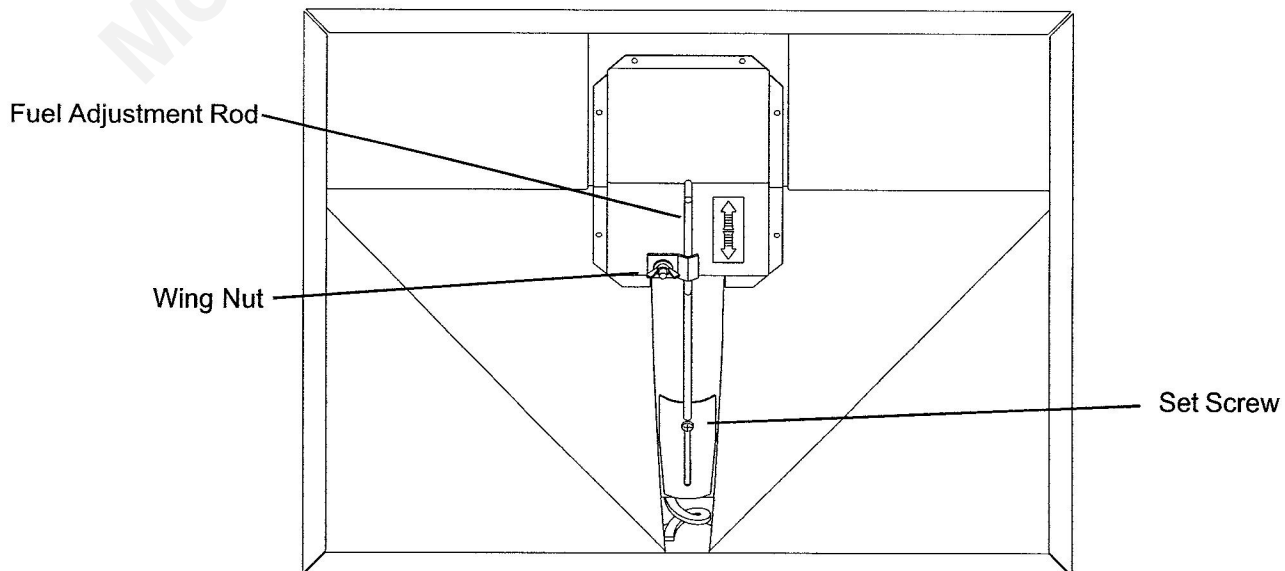
- 1) Put a layer of silicone on the 3" (76mm) exhaust outlet.
- 2) Slide the flue adapter onto the rear exhaust outlet.
- 3) Adjust the assembly to a vertical position.
- 4) Slide the outer shield up or down to mate evenly with the top of stove.
- 5) Tighten the adjusting screws (A) when the shield is in the proper position.
- 6) Drill four holes (B) with #26 drill bit (provided) into the back of the stove using the outer shield as a pattern (make sure the assembly is vertical).
- 7) Install the four mounting screws (B).
- 8) Install the stove pipe into the adapter (be sure to silicone all joints).
- 9) To clean adapter, remove cleanout cover.

FEED ADJUSTMENT

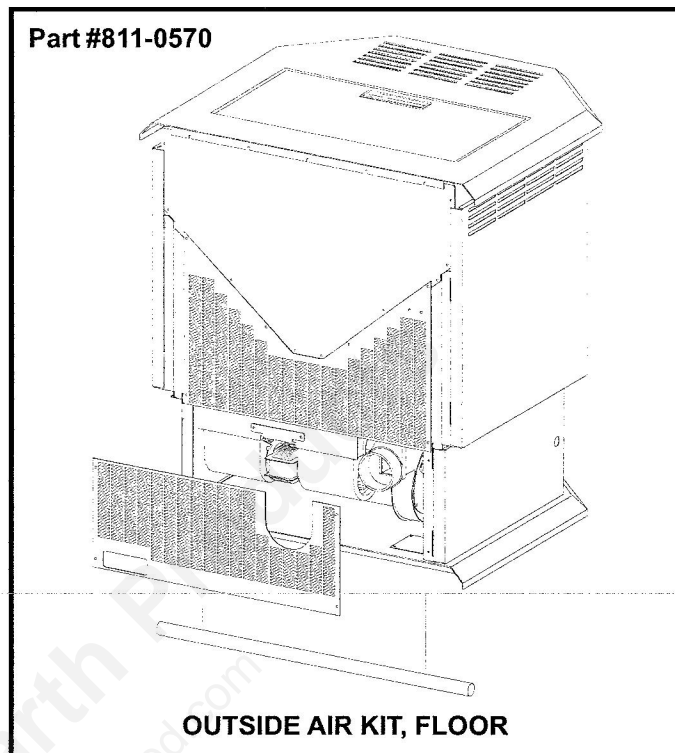
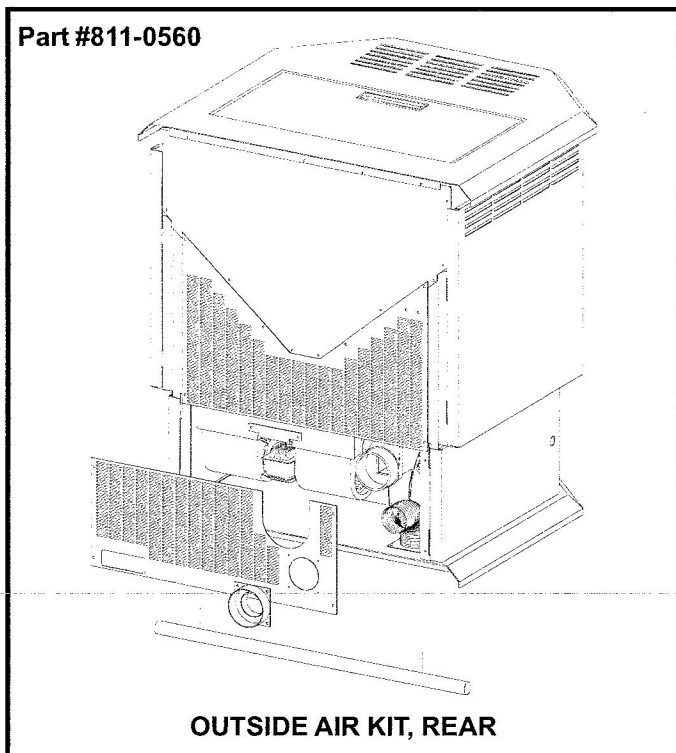
NOTE: THE FEED ADJUSTMENT ROD HAS BEEN SET AT THE FACTORY, AND SHOULD NOT NEED ANY FURTHER ADJUSTMENT. IF YOU ARE INSTRUCTED BY AN AUTHORIZED SERVICE PERSON TO ADJUST THE FEED SETTING, FOLLOW THE INSTRUCTIONS BELOW.

- 1) Remove any fuel in the hopper.
- 2) Loosen set screw 1/4 to 1/2 turn (loosen the first time you are adjusting the feed; do not retighten after adjustment).
- 3) Loosen wing nut.
- 4) Adjust the fuel feed forward to increase the feed, toward the back of the stove to decrease the feed.
- 5) Tighten the wing nut.

NOTE: Adjust fuel after the stove has been burning for 10 to 15 minutes. The flames should be 4" to 6" (102mm to 152mm) above the firepot at high heat output setting.



MOBILE HOME INSTALLATION



1. Do not install the stove in a sleeping room.
2. The structural integrity of the mobile home floor, walls and ceiling/roof must be maintained (i.e., do not cut through floor joists, wall studs, ceiling trusses, etc.).
3. An outside air inlet must be provided for the combustion air, and be unrestricted while the stove is in use.
4. The combustion air duct system must be made of metal, permit zero clearance to combustible construction, prevent material from dropping into the inlet or into the area beneath the dwelling, and contain a rodent screen.
5. The stove must be secured to the mobile home by bolting it to the floor (using lag bolts).
6. The stove must be grounded with #8 copper grounding wire or equivalent, terminated at each end with an NEC approved grounding device.
7. Refer to clearances to combustibles section on page 4 for listings to combustibles and appropriate chimney systems.
8. Seal all wall and floor inlets to prevent air or moisture penetration. Check periodically to ensure the inlet is free of obstruction (e.g., snow, ice).
9. Installation should be in accordance with the Manufactured Home and Safety Standard (HUD), CFR 3280, Part 24.

THERMOSTAT INSTALLATION

1. A 24 volt AC thermostat is required to operate this pellet stove, and is included. It is equipped with an adjustable heat anticipator. Our current rating is .05 amps. The anticipator needs to be adjusted to the lowest setting available.
2. When mounting a thermostat on a wall, be sure to follow your thermostat installation instructions carefully.
NOTE: Be sure the thermostat is mounted level for accurate readings. The thermostat should be mounted on an inside wall and not in direct line with the stove convection air.
NOTE: If the thermostat is located too close to the stove, you may need to set the temperature setting slightly higher to maintain the desired temperature in your home.
3. There is a four screw terminal block located on the back of the stove beside the power cord inlet. The top and bottom screws are the mounting screws for the terminal block. The center two screws are for the thermostat wires.

OPERATING INSTRUCTIONS

1. FUEL SIZE AND MATERIAL

Fuel pellets are made from sawdust or wood by-products. If the source material is hardwood, they will have a high mineral content, creating a heavier ash. Minerals and other noncombustible materials, such as sand, will turn into glass when heated to the extreme temperatures our firepot reaches. This is what forms clinkers in the bottom of the firepot. Trees from different areas will vary in mineral content. That is why some fuels produce more clinkers than others. Pellets are manufactured in either 1/4" (6mm) or 5/16" (8mm) diameter and many varying lengths. Pellet lengths may even vary by lot from the same manufacturer, which is why the feed rate may need to be adjusted occasionally. We recommend that you buy fuel in multiton lots whenever possible. Buying large quantities of fuel at once will greatly reduce the number of times the feed adjustments will need to be made. However, we do recommend trying various brands before purchasing multiton lots to ensure customer satisfaction.

NOTE: This stove will operate properly with either 1/4" (6mm) or 5/16" (8mm) diameter pellets.

2. BEFORE YOUR FIRST FIRE

- First, make sure your stove has been properly installed and that all safety requirements have been met. Pay particular attention to the fire protection, venting and thermostat installation instructions.
- Now open the front door of the stove and remove all of the accessories that were placed there for shipment. **Remove all labels that are affixed to the glass.**
- Check the position of the thermocouple and make sure that it protrudes approximately 1" (25mm) into the firepot. It may be necessary to slide the thermocouple and protection tube into their proper positions. Now close the front door.

NOTE: Thermocouple cover tip must be touching thermocouple tip.

- Check that all accessories have been removed before filling the hopper with pellets.
- A thermostat is required for proper operation of this stove. At this time, set the thermostat to its lowest setting.

3. START YOUR FIRST FIRE

- Now plug the stove in. The combustion blower will come on. Even though the thermostat is not calling for heat, the combustion blower will stay on for approximately 10 minutes. This is normal.
- Next, locate the heat output control switch. It is on the right side of the stove in the upper right corner of the right side panel. Switch it to the high setting by pushing the top of the switch in, then adjust the thermostat to its highest setting. The red light next to the reset button on the right side of the stove will come on. This will indicate that the thermostat is calling for heat.
- The fuel feed system and the igniter are now turned on.
- For your first fire, it will be necessary to press the reset button once approximately two minutes after start up, and again at five minutes. This will fill the feed system and allow the stove to light.
- The stove will now continue to run as long as the thermostat is calling for heat. Once the stove has ignited, let the stove burn for approximately 15 minutes, then set the thermostat to the desired room temperature. Adjust the heat output control to the desired setting (see general operation information on next page).

4. GENERAL OPERATION INFORMATION

- Understand that the stove is like most modern furnaces in that when the thermostat calls for heat, your stove will automatically light and deliver heat in the most efficient and economical way. When the room is up to temperature and the thermostat is satisfied, the stove will turn off. This stove is equipped with a heat output control that has three settings or burn rates: low, medium and high. Essentially the stove operates the same on all three burn rates. The stove will turn on and off as the thermostat demands. However, with the stove set on the lower settings, the burn times will be longer.
- Once all of the start-up procedures have been completed, simply set the thermostat to a comfortable setting and enjoy the stove. But remember, you will have to add pellets. The thermostat's location will have some effect on the stove's operation. When the thermostat is located close to the stove, it may require a slightly higher temperature setting to keep the rest of the house comfortable. If the thermostat location is upstairs while the stove is downstairs, you will notice higher temperatures near the stove.
- During each ignition cycle, it is normal to see some smoke. The smoke will stop once the fire starts.

OPERATING INSTRUCTIONS (cont.)

4. GENERAL OPERATION INFORMATION (cont.)

- d. After your stove has been burning for approximately 15 minutes, the convection blower will automatically turn on. This blower transfers heat from your stove into the room, and will continue to run after the thermostat has stopped calling for heat until all of the heat has been extracted from the stove.
- e. Occasionally, the stove may run out of fuel and shut itself down. If this happens, the red light will be on. To restart the stove, fill the hopper and press the reset button next to the light. When you press the reset button the red light will go out, and when the button is released the light will come back on. You should see a fire in about four minutes. If not, press the reset button again.

5. HEAT OUTPUT CONTROLS

- a. **Low:** On the low setting, the heat output will be approximately 14,000 to 18,000 Btus per hour, and the fuel consumption will be between 2 to 2 1/2 pounds per hour. This setting will be adequate for most smaller homes and medium size homes in milder climates. However, if your home is not warm enough and the stove never shuts off, turn the stove up to either the medium or high settings.
- b. **Medium:** On the medium setting, the heat output will be approximately 24,000 to 28,000 Btus per hour, and the fuel consumption will be between 3 1/2 to 4 pounds per hour. This should heat most medium size homes in normal winter conditions, but if the stove never shuts off, turn the stove to the high setting.
- c. **High:** On the high setting, the heat output will be approximately 36,000 to 40,000 Btus per hour, and the fuel consumption will be between 5 to 5 1/2 pounds per hour. On high, you will receive the maximum amount of heat available from this stove. This setting will work in all homes, regardless of size: when your home reaches the temperature set on the thermostat the stove will turn off automatically, and will turn on again when your home cools off.

6. HIGH/LOW FAN SWITCH

- a. This switch is located just to the right of the heat output control. It will adjust the speed of the room distribution air fan or convection blower on all three settings. This means you have six different blower speeds available, as there is a high and low on each setting.
NOTE: When your stove is set at the lowest heat output setting, the fan switch should also be on low. Running the fan on high may cause moisture to form in the exhaust system.

CLEANING AND MAINTENANCE

NOTE: Unplug the stove before performing any cleaning or maintenance

1. FIREPOT

- a. It takes very little time to clean the firepot. We recommend that you clean the firepot daily. However, if the fuel you are burning has a high dirt content, it will be necessary to clean the firepot more often. Dirty fuel will cause clinkers to form in the firepot. A clinker is formed when dirt or a nonburnable substance is heated to 2000°F (1093°C) and becomes glass-like.
- b. To clean the firepot:
 1. Wait for stove to be in complete shutdown (exhaust blower off).
 2. Pull firepot cleanout rod out, then ride back into the closed position.
 3. Open front pedestal access door and empty ash tray.

NOTE: Do not allow cleanout rod to slam back into closed position. This may damage igniter.

NOTE: NEVER pull rod when stove is operating.

2. FIREBOX ASH REMOVAL

- a. Clean as needed, and only when the stove is cool to the touch. The firebox ashes and firepot ash are all deposited into one common ash drawer, located in the pedestal. To remove and empty the ash drawer, open both the left and right side pedestal access doors. They are hinged in the back and held closed magnetically. Pull out on the back of the over center style latch and then pivot the holding rod out of the ash drawer notch on both sides. Now pull the ash drawer straight out of the pedestal and empty into a metal or noncombustible container. Place the container in a safe area, away from combustible materials. Now reinstall the ash drawer and check that both latches are secure and tight.

CLEANING AND MAINTENANCE (cont.)

2. FIREBOX ASH REMOVAL (cont.)

- b. Disposal of ashes. Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

NOTE: Embers remain hot for many days. Store in a safe place away from combustibles.

3. HEAT EXCHANGER MAINTENANCE AND CLEANING

- a. This stove has two heat exchange chambers. Each chamber is equipped with its own cleaning rod. To access the cleaning rods, simply lift the stove top up by the front. Both pull rods are located next to the face of the stove. To clean, pull the rod straight out approximately 20" (508mm). Move the rod in and out a couple of times.
- b. **HOW OFTEN SHOULD YOU CLEAN THE HEAT EXCHANGER?** The amount of ash buildup in the firepot will be a good guide to determine how often you should clean the heat exchanger. Typically, you should clean the heat exchangers at least once a week. This will keep your stove running at peak efficiency. Also, after burning approximately one ton of fuel, the ash will need to be removed from beneath the heat exchangers. To do this, open both the right side panel and the right pedestal access door. Open the exhaust cleanout door with a Phillips head screw driver and vacuum out the exhaust chamber. Then reinstall the exhaust door and close both side panels.

4. VENTING SYSTEM

The venting system should be inspected and cleaned at least once a year, or more often depending upon the quality of your fuel. If you are experiencing nuisance shutdowns, check for a clogged exhaust system. If the exhaust is restricted, the vacuum safety switch will shut the feed motor off (the red light will remain on).

5. DOOR LATCH ADJUSTMENT

The same latch is used on both the front door and the ash drawer. To adjust, open the latch and pivot the holding rod out. Now loosen the jam nut on the rod. With a Phillips head screwdriver, turn the rod clockwise to tighten. The latch handle should snap securely in place when adjusted properly. After adjusting the latch, be sure to tighten the jam nut on the rod to hold the adjustment.

6. BLOWERS

- a. There are two blowers in this stove: an exhaust blower that vacates the exhaust out of the firebox, and a convection blower that delivers heat into the room. **THESE BLOWERS REQUIRE NO LUBRICATION.**
- b. The exhaust blower is located on the left side of the stove. To inspect it, open both left side access panels.
NOTE: There is no need for annual cleaning.
- c. The convection blower is accessible by opening both pedestal access panels. This blower has two impellers on it, and should be cleaned at least once a year. You can do this without removing the blower. Simply brush and vacuum the impellers from both sides.

7. READING THE FIRE AND ADJUSTMENT PROCEDURES

A properly adjusted fire with the heat output control set on high has a short active flame pattern that extends out of the firepot 4" to 6" (102mm to 152mm). If the fire has tall flames with black tails and seems somewhat lazy, the feed rate will need to be reduced. This is done by sliding the feed adjustment plate down, which will reduce the feed. If the fire is not 4" to 6" (102mm to 152mm), slide feed plate up to increase the feed. Allow five minutes for feed adjustment to take effect.

8. SOOT AND FLY ASH - FORMATION AND NEED FOR REMOVAL

The products of combustion will contain small particles of fly ash. The fly ash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during start-up, shutdown, or incorrect operation of the room heater will lead to some soot formation, which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary.

COMPONENT INFORMATION

1. POWER SUPPLY

- A. Check the wall receptacle for 120 volt, 60 Hz (standard current). Make sure the outlet is grounded and has the correct polarity.

2. FUSE

- A. The fuse is on the front of the junction box, located on the right side of the stove. To access fuse, open the right side panel and remove the inner heat shield. Lift slightly and pull out. To inspect the fuse, push the fuse holder in and turn the holder cap counterclockwise, then pull out. Replace with a standard 7 amp 120 volt fuse, if necessary. If the fuse continues to blow, contact your local dealer.

3. RED CALL LIGHT

- A. The red call light is located on the right side next to the reset button. The function of the red call light is to indicate that the thermostat is calling for heat.
- B. If the thermostat is calling for heat, the stove is burning, and the light is not on, check the bulb. Replace with a 28 volt AC (#85 lamp) bulb.

4. RESET BUTTON

- A. The reset button is located on the right side of the stove, next to the red call light. The function of the button is to momentarily open the thermostat circuit, which restarts the system. However, this will only work when the thermostat is calling for heat and the red light is on.
- B. If the light is on, there is no fire, and there is fuel in the firepot, push the reset button and wait for ignition. You should have a fire within five minutes.
- C. If the light does not go out when the reset button is pushed, the reset button switch may be faulty. Contact your local dealer.

5. VACUUM SWITCH

- A. The vacuum switch is located on the left side of the stove, just behind the inner heat shield. This switch turns the feed system on when vacuum is present in the firebox. Check the rubber hose for leaks or cracks if the feed system fails to start. Also, be sure there is no restriction in the exhaust system and the exhaust blower is running. The vacuum switch is a safety device to shut off the feed motor under the conditions above.
- B. If the exhaust or the heat exchanger system is dirty or plugged, the vacuum switch will keep the feed system from starting.
- C. If the firebox door is open or the ash drawer is not installed properly, the vacuum switch will keep the feed system from starting.

6. JUNCTION BOX AND WIRING HARNESS

- A. The junction box is located on the right side of the stove, behind the inner heat shield. It contains the heat output controls, reset button, call light and fuse holder.
- B. The junction box and the wiring harness are replaced as one component.

7. THERMOSTAT

- A. The stove is designed to run on a 24 volt AC thermostat.
NOTE: The heat anticipator should be set on the lowest setting available. Also, check the wire leads at the terminal block located at the back of the stove for loose connections.

8. CONTROL BOX

- A. The control box plugs into the back side of the junction box. It is held in place with a bracket secured by two screws from inside the hopper. If the stove has just been plugged in and the combustion blower does not start, check snap disc #2, then check to make sure the stove is plugged in. Next, check the control box to see that it is securely plugged in. If this does not solve the problem, consult your local dealer.

NOTE: To see the temperature indicator lights, the right side panel must be open and the inner heat shield removed.

- B. The green light located on the side of the control box notifies you that the stove has reached a temperature of 200°F (93°C) in the firepot. After the stove is lit, if this light does not light in the first four minutes of operation, the stove will shut down. Check the thermocouple.
- C. The red light located to the left of the green light is to indicate that the stove has reached operating temperature. If this light does not come on in the first nine minutes of start-up, the stove will shut down. The stove will not try to relight again by itself. You must manually push the reset button to reset the cycle.
- D. If you suspect a problem with the control box, disconnect the power supply from the stove, then remove the control box and take it to your nearest Quadra-Fire dealer for testing.

NOTE: Do not open the control box. This will void the warranty. Do not plug in or remove control box without first unplugging the stove and turning the thermostat down.

9. THERMOCOUPLE

- A. The thermocouple is located on top of the firepot inside the ceramic protection tube. Remove the ceramic tube and inspect the thermocouple for deterioration or breakage.
- B. Check the terminal block screws to see if they are tight and making a good electrical connection (located on the side of the junction box).
NOTE: The yellow wire is connected to the upper terminal, and the red wire is connected to the lower terminal.
- C. Upon reinstalling the ceramic cover, be sure the thermocouple is touching the inside end of the ceramic tube and that the cover is extending 1" (25mm) into the firepot.

COMPONENT INFORMATION (cont.)

9. THERMOCOUPLE (cont.)

- D. The thermocouple sends a millivolt signal to the control box to obtain the green and red lights for the preset temperatures.

10. SNAP DISC #1 (CONVECTION BLOWER) 125°F

- A. Snap disc #1 is located on the right side of the stove, on the bottom of the heat exchanger box. Two purple wires are connected to it. This snap disc turns the convection blower (heated air) on and off as needed. Power is always present at snap disc #1.

11. SNAP DISC #2 (THERMOSTAT OVERRIDE) 200°F

- A. Snap disc #2 is also located on the right side of the stove, between snap disc #1 and the convection blower. Two yellow wires are connected to it. This snap disc will bypass the thermostat and turn off the stove if an overheat condition occurs, or if the convection blower should fail to operate. The stove will go into a normal shutdown: the combustion blower will run for ten minutes, then turn off. After the stove cools, the snap disc will automatically reset itself and the stove will relight.

12. SNAP DISC #3 (BACKBURN PROTECTOR) 250°F

- A. Snap disc #3 is mounted on the right side of the auger tube, just below the feed motor. To access it, remove the feed motor cover box from inside the hopper. If, for any reason, the fire tries to burn back into the feed system or push exhaust up the feed tube, this snap disc will shut the entire system off. However, sometimes in shipment the disc will trip and shut power off to the entire stove. Power failures and surges can also trip this disc. To reset, unplug the stove from outlet and push in the red reset button in the center of the snap disc, then plug the stove back in and try to relight it.

13. BLOWER #1 (EXHAUST BLOWER)

- A. The 80 cfm exhaust blower is located on the lower left side of the stove. The exhaust blower is designed to pull the exhaust from the stove and push it out through the venting system. To inspect it, remove the right rear (facing the stove from the front) pedestal access door. The blower may now be visually inspected.

14. BLOWER #2 (CONVECTION BLOWER)

- A. The 165 cfm convection blower is mounted at the rear of the stove. There are two impellers, one on each side of the motor. The convection blower blows heated air through the heat exchange system into the

room.

- B. To replace this blower, remove the lower rear screen. The motor is mounted on a removable bracket. Remove the two screws just above the motor and the whole assembly will tilt down and pull out. You should inspect this blower at least once a year. If dust buildup has accumulated, clean by simply brushing and vacuuming dust off the blades.

15. FEED SYSTEM

- A. The feed system is located in the hopper under the feed motor cover box. To inspect, remove the cover. This system uses a hollow auger spring to pull pellets up the feed tube from the hopper area and drop them down the feed chute into the firepot. If you are having fuel problems, check the following:
 1. Check the ramp in the firebox to see that it is free of fuel or other materials.
 2. Check the set screw on the end of the motor shaft to see that it is tight and not slipping.
 3. Check the electrical power to motor.
 4. Check the vacuum switch hose connections.

16. IGNITER

- A. The igniter is mounted on the firepot. To inspect the igniter, remove the ash drawer from the pedestal and then remove the inspection cover. There are two mounting screws holding the cover plate in place. They are just under the ashcatcher and to the right of the firepot cleaning rod. With this cover removed, you can inspect both the igniter and firepot, and have gained access for removal or replacement of either part.
- B. Check the wire leads to the igniter for loose or bad connections (ceramic wire nuts).
NOTE: Unplug stove before checking wire nuts.

17. FIREPOT

- A. Clean the firepot (see section on cleaning and maintenance on page 14).
- B. When inspecting the firepot, make sure that the firepot floor is closing completely. Then see that the bottom floor is closing with no visible gaps, and is free of any ash or debris.

18. DOOR GASKET

- A. To inspect the door gasket, open the door and look for an indentation in the rope from the sealing edge of stove body.

19. HEAT EXCHANGERS

- A. The heat exchangers (one on each side) can be accessed by lifting the stove top. Each heat exchanger has a cleanout rod located in the center of the heat exchanger. To clean heat exchanger see page 14, heat exchanger cleaning and maintenance.

TROUBLESHOOTING

CAUTION: UNPLUG STOVE BEFORE SERVICING

1. PLUG IN STOVE, NO RESPONSE

- A. Check the power supply for 120 volts AC.
- B. Check the fuse in the junction box (7 amp, 120 volt fuse AGC-7).
- C. Check snap disc #3 (unplug stove before checking). Push reset on snap disc #3.
- D. Control box (consult your dealer).

2. CALL LIGHT ON, NO FIRE, NO FUEL IN FIREPOT

- A. Check the hopper for fuel, sawdust or bridging of pellets in the bottom of the hopper. If the hopper is low on fuel, vacuum can be lost through the hopper.

NOTE: Sometimes there might still be fuel in the hopper. If so, continue to check the areas below.

- B. Make sure that the exhaust blower is operating.
- C. Check the venting system for obstructions that might cause restrictions, which would cause the vacuum safety switch to shut off the auger.
- D. Check the heat exchanger system for high ash content. If buildup is present, clean the heat exchanger system.
- E. Push the reset button, and try, to light the stove again.

3. CALL LIGHT ON, NO FIRE, PARTIALLY-BURNED FUEL IN THE FIREPOT

- A. Clean the firepot.
- B. Check the hopper for fuel or bridging problems, as the firepot may not have received enough fuel to start.
- C. Inspect the thermocouple and cover for the following:
 1. The cover needs to be making contact with the end of the thermocouple.
 2. The thermocouple and the cover should extend approximately 1" (25mm) into the firepot (for accurate temperature reading).
 3. Push the reset button. When the thermocouple reaches 200°F (93°C) the GREEN LIGHT will come on, and at 600°F (316°C) the RED LIGHT will come on.

NOTE: If the lights fail to come on after the fire starts, the thermocouple may be faulty.

- D. If the thermocouple appears good, the control box may be the problem (consult your dealer).

4. CALL LIGHT ON, NO FIRE, UNBURNED PELLETS IN FIREPOT

- A. Clean the firepot.
- B. Push the reset button.
- C. Check the igniter to see that it comes on (see a glow in the firepot). If it does not turn on, check the following:
 1. Check the connections under the firepot. (Ceramic wire nuts must be used to withstand the heat produced by the firepot.)
 2. Make sure that the igniter is properly installed in the igniter bracket. It should fit tightly, and be centered in the igniter hole.

5. SLOW OR SMOKY START-UP

- A. Clean the firepot.
- B. Check the combustion blower (make sure that it is starting when the thermostat calls for heat).
- C. Visually check the cleanliness of the firebox, the heat exchangers and the venting system.
- D. The feed rate may be too high. If necessary, adjust with the fuel adjustment rod located in the hopper.

6. STOVE RUNS FOR 10 MINUTES, THEN STOPS FEEDING FUEL

- A. Inspect the thermocouple and the cover.
 1. The cover needs to make contact with the end of the thermocouple.
 2. The thermocouple and the cover should extend approximately 1" (25mm) into the firepot.
 3. Push the reset button. The thermocouple test lights located on the control box will automatically turn on; when the thermocouple reaches 200°F (93°C) the GREEN LIGHT comes on, and at 600°F (316°C) the RED LIGHT comes on. If they fail to turn on after the fire starts, the thermocouple may need replacement.
4. Check the control box (consult dealer).

7. FEED SYSTEM FAILS TO START

- A. Make sure that the front door to the firebox and the ash drawer in the pedestal are closed tightly.
- B. Check to make sure that the exhaust blower is coming on and working.
- C. Adjust heat output control to high.
- D. Check the heat exchangers and the venting system for obstructions or heavy ash buildup.

TROUBLESHOOTING (cont.)

7. FEED SYSTEM FAILS TO START (cont.)

- E. The vacuum switch hose may be plugged.
 - 1. Pull the hose off and blow through it to make sure it is clear.
- NOTE: Unplug stove from power outlet first.**
- F. Downdrafts or poor venting systems that do not follow manufacturers recommendations can also cause this problem.
- G. Check the hopper and the feed system for blockage.

8. THERMOSTAT WILL NOT START UNIT

- A. Check the power to the stove.
 - 1. Unplug for 10 seconds and then plug in. The exhaust blower should come on. If it does, go to B. If not, see Troubleshooting item #1.
- B. The thermostat or the thermostat wiring may be faulty.
 - 1. Disconnect the thermostat wires from the terminal block located on the back of the stove. Make a jumper wire in order to create a manual bypass to determine if the stove or the thermostat is faulty.
- NOTE: Unplug the stove while hooking up the jumper wire. Plug the stove back in and the unit should come back on and light. If the unit lights, check the thermostat and the wires connecting them.**
- C. Snap disc #2 would bypass the thermostat if an overheat situation occurs. The snap disc should reset itself once it cools down.
- D. Snap disc #3 may need to be manually reset if the unit has overheated.
- E. Check the control box (consult dealer).

9. UNIT FAILS TO SHUT OFF

- A. Check the thermostat and the thermostat wires.
 - 1. Remove one of the thermostat wires from the terminal block; the stove should go into a normal shutdown cycle. If it does, the problem is in the thermostat or the thermostat wiring.
- B. Check the control box (consult dealer).
- C. Check the junction box (consult dealer).

10. SMOKE FROM THE CONVECTION AIR OUTLET

- A. Check the exhaust blower housing and **all** venting connections.
- B. Most problems with smoke in the house are the result of a poor venting system or unsealed joints.

11. CONVECTION BLOWER KEEPS RUNNING OR FAILS TO START

- A. Snap disc #1 may need to be replaced.
- B. Check the wire connections on snap disc #1 and the convection fan to be sure a good contact is being made.
- C. Check the convection blower.

12. STOVE CYCLES ON AND OFF, THERMOSTAT ALWAYS ON

- A. Check that snap disc #1 is coming on and turning the convection blower on. If not, snap disc #2 could be bypassing the thermostat until the snap disc cools and resets itself.

13. LARGE FIRE, ASH BUILDUP AND DIRTY GLASS

- A. Clean the firepot.
- B. Visually check the cleanliness of the firebox, the heat exchangers and venting system.
- C. Reduce the feed rate, if necessary.

14. UNIT BURNING, NO CALL LIGHT

- A. Replace light bulb (#85 lamp).

ACCESSORIES AND SERVICE PARTS

ACCESSORIES

811-0580	Top Flue Adapter, 3" x 3"
812-2690	Top Flue Adapter 3" x 6" Collar
811-0570	Outside Air Kit, Floor
811-0430	Outside Air Kit, Rear
811-0590	Log Set
811-0600	Brick Set (sides and back)
812-3760	Mechanical Thermostat
811-0520	Programmable Thermostat

SERVICE PARTS

812-3450	Fireboard, Left Side
812-3460	Fireboard, Right Side
812-3470	Fireboard, Back Left
812-3480	Fireboard, Back Right
812-3370	165 cfm Convection Blower
812-3380	80 cfm Exhaust Blower
812-3390	Control Box
812-3500	Heat Adjustment Switch
812-3400	Feed Motor
812-3350	EZ Clean Firepot
812-3510	Front Glass
812-3520	Side Glass (Left or Right Side)
812-3410	Junction Box/Wiring Harness
812-3530	Firebox & Ash Drawer Latch
812-3440	Baffle, Stainless Steel, Center
812-3540	Baffle, Left
812-3550	Baffle, Right
812-1560	#1 Snap Disc (125 Degree Convection Fan)
812-3420	#2 Snap Disc (200 Degree High Limit)
812-0340	#3 Snap Disc (High Limit)
812-1322	Thermocouple Cover
812-0210	Thermocouple
812-3430	Vacuum Switch



North America's Best

Lifetime Warranty

Aladdin Hearth Products, warrants their pellet heating appliances to the original purchaser for the lifetime of the appliance, to be free from defects in material and workmanship. This warranty gives you specific legal rights; you may have other rights which may vary from state to state.

This limited Lifetime Warranty covers items such as but not limited to combustion chambers, heat exchanger systems, stainless steel firebox components, doors, gold plating, and glass damaged by thermal breakage.

All parts to be replaced must be returned to an authorized Aladdin Hearth Products dealer at purchaser's expense for inspection and approval by Aladdin Hearth Products prior to repair or replacement. No repair or replacement costs will be honored without approval of Aladdin Hearth Products.

This new Quadra-Fire product must be installed by a competent, authorized service contractor. It must be installed and operated at all times in accordance with the Installation and Operating Instructions contained in this manual, as well as any applicable local and national codes. Any alteration, willful abuse, accident, or misuse of the product shall void this warranty.

Any installation, construction, transportation, or other related costs or expenses arising from defective part(s), repair, replacement, etc., will not be covered by this warranty, nor will Aladdin Hearth Products assume responsibility for them. Further, Aladdin Hearth Products will not be responsible for any incidental, indirect, or consequential damages, except as provided by law.

Our EZ Clean and ceramic firepots are both covered under Aladdin's three year warranty program.

All electrical components such as but not limited to blowers, igniters, wiring, vacuum switches, speed controls, control boxes, and thermodisc switches are covered by Aladdin's one year warranty program.

Aladdin Hearth Products, will not be responsible for any alteration to the unit which causes sooting that results in damage to the interior or exterior of the building in which this appliance is installed.

This warranty is void if the stove has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals, the stove is subjected to prolonged periods of dampness or condensation, or there is any damage to the stove or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

This limited Lifetime Warranty does not extend to or include paint, pellet stove logs, door gasketing, glass gasketing, firebrick or other ceramic insulating materials. It does not cover installation or operational-related problems such as overfiring, downdrafts or spillage caused by environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, or negative air pressures caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

This limited Lifetime Warranty does not apply to venting components, hearth components or other accessories used in conjunction with the installation of this product not manufactured by Aladdin Hearth Products. This limited Lifetime Warranty is effective on all pellet stoves sold after September 1, 1996, and supersedes any and all warranties currently in existence.

---IMPORTANT---

This warranty is not valid unless the warranty registration card has been properly completed in full and returned within 10 days from the date of purchase.

FOR YOUR RECORDS:

DATE PURCHASED _____ MODEL # _____

AUTHORIZED DEALER _____ SERIAL # _____

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