

SOLITAIRE PFA 2000

The pellet fired appliance

Owner's Manual & Operating Instructions

Tested by Omni Environmental Services, Inc.

Safety Notice: If this appliance is *not* properly installed, a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation inspection requirements in your area. This appliance must be connected to a UL listed exhaust vent of the correct diameter and then may be connected to existing class "A" chimney, or to a tile-lined masonry chimney.



Proudly Manufactured by: SWEET HOME, INC.,
1307 CLARK MILL ROAD
SWEET HOME, OREGON 97386

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INTRODUCTION

CONGRATULATIONS on your purchase of the Sweet Home Stove. We are confident that your new stove will provide you with years of safe, comfortable and efficient heating.

Your Sweet Home Stove is a Freestanding/Mobile Home approved pellet-fueled heating appliance tested by Omni Environmental Services, Inc. (ICBO TL-130). Safety testing is in accordance with UL 1432 and UM 84 HUD standards. This model is also approved by the Oregon Department of Environmental Quality (DEQ) as a clean burning appliance.

This manual has been compiled to provide you with all the necessary information for the proper installation, operation and maintenance of your Sweet Home Stove. Please read it carefully.

Please make a note of the control number located at the top of the metal ID tag on the rear of the stove. If you should need in-

formation from your dealer, or the factory, use this number for reference.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

WARRANTY

SAFETY NOTICE

If this appliance is **NOT** properly installed a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

GENERAL FACTS

The following materials are included with the purchase of the Solitaire PFA-2000.

1. Plain ceramic glass (8 x 12)
2. 1 Cam-head screw driver for door fastener
3. Installation Instructions/Owners Manual
4. Warranty Card

Options which are available are:

- Mobile home kit
- Etched glass designs

Building permits are required by law for the installation of all heating devices. It is best to have a professional install your Sweet Home Stove, but if you prefer to install it yourself (See Installation Instructions, page 2), be sure to obtain a permit and have the local building officials inspect the stove for safety and compliance with all codes after the installation is complete.

A scheduled plan for cleaning the chimney must be observed. A buildup of resins from wet pellets can cause a flue fire (See Maintenance Section).

Your Sweet Home Stove must have its own exhaust vent, or chimney with no other appliance connected to it. If more than one heating device is attached to a common flue it may be a source of trouble. This trouble may come in the form of flue gases drawn into the house through an unused opening, or in

the form of poor draw, abnormal condensation of liquids in the chimney, rapid creosote accumulation or plugging.

You also need a **hearth extension** made of **non-combustible** material at least 3/8-inch thick. Recommended size is shown in the Table #1.

Minimum distance between the floor and ceiling will be 72 inches in an alcove; 84 inches in all other installations. Offsets of 15 degrees to 90 degrees in approved chimney systems may be employed if all manufacturer installation clearances are observed.

Special methods are required when passing exhaust vent, or chimney through a wall or ceiling, or when venting into an existing fireplace. See Pipe Instructions Manual and/or local building codes. Be sure to have your installation inspected by a local building official. Building Officials are most helpful in planning your installation for safety.

Do not overfire this appliance. A glowing stove or exhaust vent is hazardous.

Keep furniture, plants and other combustible materials a considerable distance away from this appliance.

NOTE: This appliance shall not be installed in a sleeping room.

SPECIFICATIONS TABLE

Model	OVERALL DIMENSIONS				* Vent Size	Vent Type	** Hopper Capacity (lbs.)	Burn Times (hrs.)		*** Heat Output	Draft Requirements (inches water)
	Width	Depth	Height	Wt(lbs)				Hi	Lo		
Solitaire PFA-2000	32	24 3/4	32 3/4	300	3-4	"L"	50	10-12	24-32	8-27	0.2-1.0

Note: All dimensions are in inches except where indicated.
*Distance to center of exhaust vent from floor: 7 1/2".
**Recommended Brands of Fuel: LIGNETICS, WEST OREGON WOOD PRODUCTS, CENTRAL LINN PELLET MILLS.
***Specified in 1000's of BTU/h



ORTECH INDUSTRIES, INC. P.O. BOX 5668 ALOHA, OREGON 97006 (503) 640-1607 FAX (503) 648-4235

WARRANTY

PARTS - REPLACEMENTS FOR FACTORY DEFECTIVE PARTS WILL BE SUPPLIED FREE FOR 1 YEAR FROM DATE OF PURCHASE. REPLACEMENT PARTS ARE WARRANTED FOR THE REMAINING PORTION OF THE ORIGINAL WARRANTY PERIOD. YOU MAY OBTAIN WARRANTY PARTS DIRECT FROM ORTECH INDUSTRIES BY WRITING TO ORTECH INDUSTRIES INC. P.O. BOX 5668 ALOHA OR. 97006. PLEASE RETURN THE DEFECTIVE PARTS SO WE MAY DETERMINE THE FAILURE MECHANISM.

SERVICE LABOR - FOR A PERIOD OF 1 YEAR FROM DATE OF PURCHASE, ANY MALFUNCTION CAUSED BY THE DEFECTIVE PARTS OR ERROR IN DESIGN WILL BE CORRECTED AT NO CHARGE TO YOU. YOU MUST DELIVER THE UNIT AT YOUR EXPENSE TO ORTECH INDUSTRIES FACTORY AT 1982 N.E. 25TH AVE. # 5 HILLSBORO OR. 97124.

TECHNICAL CONSULTATION - YOU WILL RECEIVE FREE CONSULTATION ON ANY PROBLEM YOU MIGHT ENCOUNTER IN THE USE OF YOUR ORTECH INDUSTRIES PRODUCT. JUST DROP US A LINE.

THIS WARRANTY COVERS ONLY ORTECH INDUSTRIES PRODUCTS AND IS NOT EXTENDED TO OTHER EQUIPMENT OR COMPONENTS THAT A CUSTOMER USES IN CONJUNCTION WITH OUR PRODUCTS.

SUCH REPAIR AND REPLACEMENT SHALL BE THE SOLE REMEDY OF THE CUSTOMER AND THERE SHALL BE NO LIABILITY ON THE PART OF ORTECH INDUSTRIES INC. FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO ANY LOSS OF BUSINESS OR PROFITS. WHETHER OR NOT FORSEEABLE.

OWNERS RESPONSIBILITY

EFFECTIVE WARRANTY DATE - WARRANTY BEGINS ON THE DATE OF FIRST CUSTOMER PURCHASE. YOU MUST SUPPLY A COPY OF YOUR PROOF OF PURCHASE WHEN YOU REQUEST SERVICE OR PARTS.

SHIPPING UNITS - PROPER SHIPPING PROCEDURES MUST BE USED. DAMAGE DUE TO INADEQUATE PACKING CANNOT BE REQUIRED UNDER WARRANTY.

INSTALLATION INSTRUCTIONS

Correct installation of your Sweet Home PFA requires the use of one of the approved exhaust vent systems from the list.

NOTE: For optimum performance, 3" vent, which extends no further than eight feet in a horizontal position, is recommended. This 3" vent may be installed vertically (through the ceiling and roof), or horizontally (through the wall). In vertical installations, remember... your exhaust vent must extend a minimum of three feet above your roof and at least two feet above any obstacle within ten feet of the vent cap.

NOTE: Maximum horizontal run distance for vent system is eight feet. Attempting to extend vent systems further than eight feet in the horizontal position may cause the appliance to malfunction.

NOTE: For Mobile Home Installation it is required that outside air be used for combustion and that the appliance be grounded to the metal frame of the home via a #8 copper wire. **The PFA Mobile Home Kit includes the outside air vent converter and air intake vent (with rodent guard). Observe Mobile Home Clearances from tables.** (Refer to Figure #3).

The following materials will be helpful, if not essential in the installation of your Sweet Home Solitaire PFA.

- Carpenter's level
- Screwdriver
- Adjustable wrench
- Plumb bob
- Tin snips
- Tape measure
- Hammer
- Jig saw or Key-hole saw
- Skil or circular saw
- Roofing cement
- Silicone caulking
- Nails

Remove stove and parts from boxes, check to see that all parts are present and that there is no freight damage. Report any damage to your dealer or freight company immediately.

AS A FREESTANDING STOVE

Place the hearth pad on the floor in the desired location. The exhaust vent must be located so as to pass between roof trusses in vertical installations, or between the studs in a through-the-wall installation. (See Figure #2). When the desired location is decided upon, and before making your final decision, make sure that all clearances to combustible surfaces have been observed. (See Clearances in Table #1). Also, check roof, or outside wall of the home, near where the vent will be to see that there are no obstructions that will interfere with the proper placement of the exhaust vent flashing. Position the hearth pad so that the stove will line up with the exhaust vent and also maintain

tain proper clearances to combustibles.

Now, observing the foregoing precautions, position the hearth pad.

With the stove set in place, locate the center of the exhaust vent by using a plumb bob in vertical installation, or by careful measurement from the hearth pad to the center of the hole in horizontal installations. Now cut out an appropriately sized hole through the ceiling and roof, or through both the inner and outer walls (refer to approved exhaust vent installation instructions). Be careful to avoid any electrical conduit or air ducts in the attic or wall areas.

With **all** exhaust vents a heat shield must be installed around the vent pipe as it passes through the attic area or the walls of the home. Follow vent manufacturer's installation instructions and refer to Figure #2.

Adjustable offsets (or elbows) in the chimney system from 15 degrees through 90 degrees are available from the manufacturers of both of the approved vent systems. These may be used with your PFA, if needed.

You are now ready to install the exhaust vent. *Note: Each vent systems comes with a complete set of manufacturer's installation instructions. Follow these carefully.*

AS A HEARTH MOUNT

(The **Solitaire PFA** may vent into an existing fireplace chimney. It is approved for installation in masonry and heat-form fireplaces).

Be sure to observe all hearth pad extension and clearances to combustibles requirements when placing the **Solitaire PFA** as a hearthmount stove. See Table #1.

CAUTION:

1. Use only one of the approved vent systems.
2. Do **not** intermix vent system parts.

Place the first piece of exhaust vent on the vent collar at the back of the PFA (located low on the left rear of the appliance). The vent collar is designed to accept both of the approved vent systems in a snug fit. Be sure to fully seat this first section of vent pipe on the stove's vent collar. Follow approved vent systems manufacturer's installation instructions to complete assembly of the vent pipe through the roof, or the wall (refer to Figure #2).

The stove's exhaust vent must be connected to the throat of the lined portion of masonry chimneys using a method which complies with NFPA 211 codes. This method involves the installation of a **blocking plate** at the lintel level of the fireplace damper throat. Then, one of the listed vent systems is used to connect the appliance through the **blocking plate**, into the chimney.

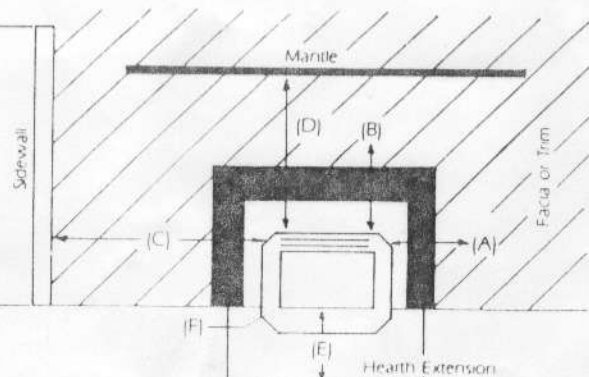
(Refer to Figure #1.)

TABLE 1

Clearances and Hearth Extension for Hearthmount Application of the PFA.

- (A) 0 inches with a 5 inch minimum distance from the vent connector.
- (B) 9 inches
- (C) 6 inches
- (D) 9 inches
- (E) 6 inches
- (F) 1 inch

Note: PFA exhaust vent must have a **direct-connect** to masonry fireplaces built to UBC 37.



Clearances for Freestanding/Mobile Home Applications of the PFA. Dimensions from stove body

Installation	Type	Clearances	Vent Connector	Dimensions from stove body		
				Side	Rear	Corner
Residential	Vertical	Standard	Note 1	6	12	6
Residential	Horizontal	Reduced	Note 1 & 2	6	4.25	6
Mobile Home	Vertical	Standard	Note 1	6	12	6
Mobile Home	Horizontal	Reduced	Note 1 & 2	6	4.25	6
Alcove	Vertical	Standard	Note 1 & 3	10	12	N/A
Alcove	Horizontal	Reduced	Note 1, 2 & 3	10	4.25	N/A

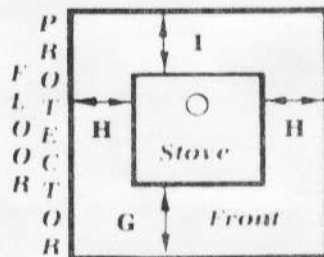
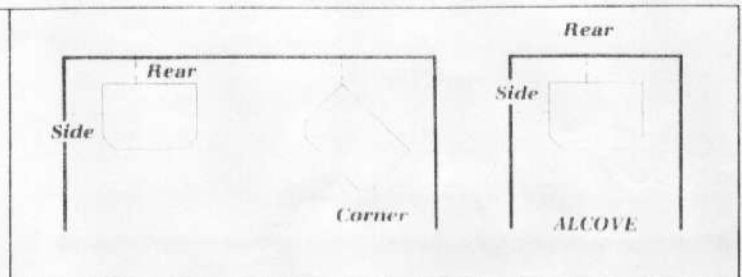
Note 1: 3 or 4 inch pellet vent system (Ryder or DuraVent).

Note 2: Horizontal connector (through-the-wall) **only**.

Note 3: Minimum Alcove Size: 72"H x 52"W x 48" maximum depth.

TABLE 1

continued



- G. 6"
- H. 1"
- I. 0"

Hearth Extension for PFA when installed as a Freestanding unit.

Floor protector (hearth extension) **must** be 3/8 inch minimum thickness non-combustible material.

FEATURES

The **Solitaire PFA** includes multiple *safety and fail-safe systems* built into its **Electronic Operating System**.

A. A **HOPPER LID SWITCH** automatically shuts off the auger whenever the hopper lid is opened and restarts when the lid is closed. This feature ensures safe refueling procedures. This switch also tells the Draft Inducer Fan to continue running when the lid is open. This guarantees that no smoke will enter the hopper.

B. A **CIRCULATING FAN THERMOSTAT** signals the circulating fans to blow room air through the heat exchangers, but only if the stove is warm enough to provide warm air for your home. A pair of 300CFM (cubic feet per minute) fans move room air across the stove's heat exchangers and then push this heated air throughout your entire home.

C. A thermostatically controlled **LOW LIMIT SWITCH** provides three functions:

- i. A six-minute **start cycle** makes the **Solitaire PFA** easy to light.
- ii. Instructs the Draft Inducer Fan to *clear the system* of all smoke before it stops running. This ensures that when the stove is turned off the entire system will be cleared of all smoke, unburned pellets and flyash. When ashes don't build up in the firepot, the possibility of *clinkering*, severe enough to disable a pellet stove, is virtually eliminated.

iii. In the event of an **extended power outage** it tells the stove not to automatically turn back on, but to wait for the homeowner to restart it when the power is restored. This prevents the auger from automatically filling a cold firepot and firebox with pellets.

D. The **Solitaire** is protected two ways from overfiring:

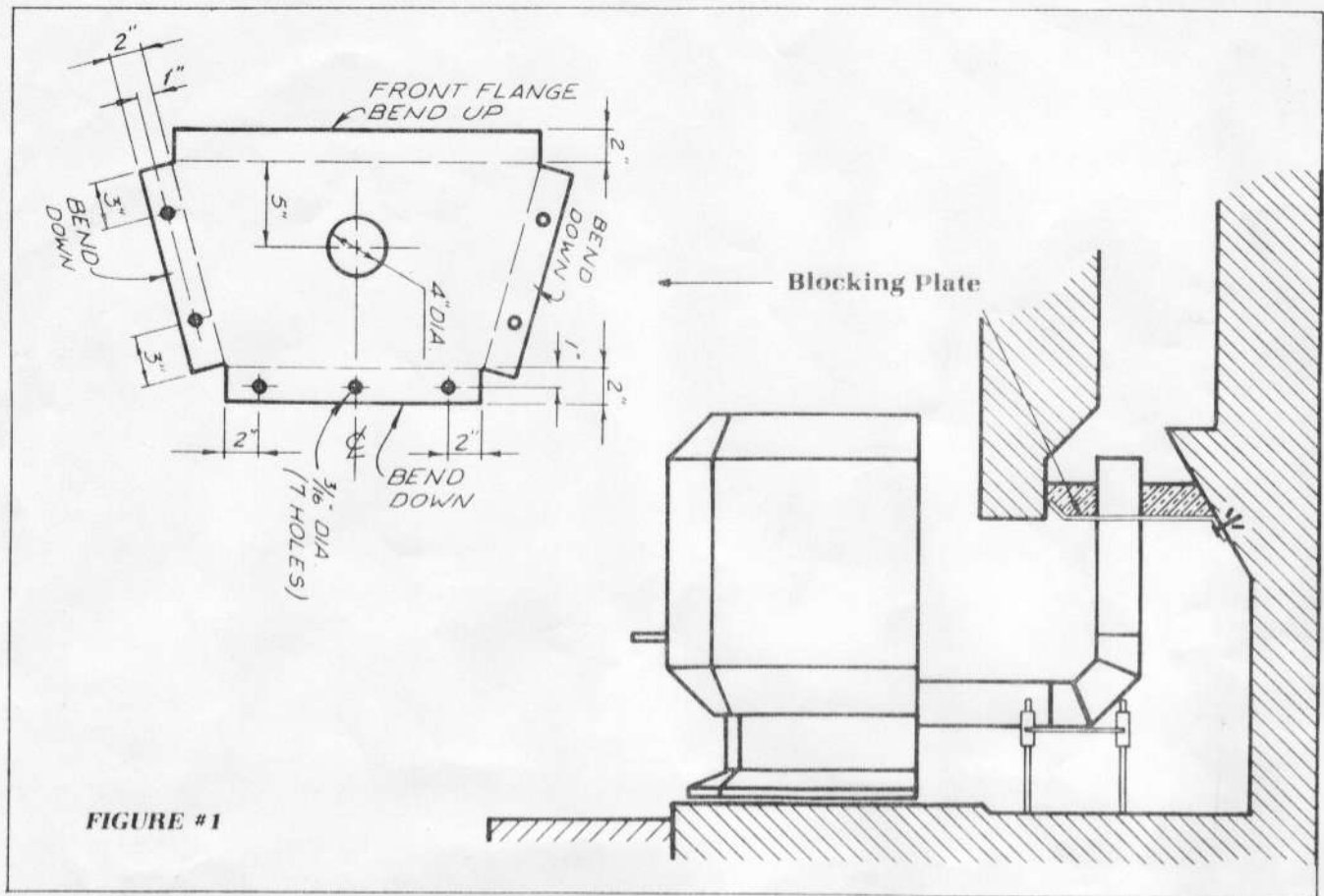
- i. Should an **OVERFIRE THERMOSTAT** detect any unusual (but still safe) temperatures on the auger tube it turns the auger and draft inducer fan off. When this happens a red **LED** (light emitting diode) labeled *Overfire* lights up. Once temperatures return to normal operating levels the **PFA** may be re-lit after the master switch has been turned off and then back on.
- ii. As a back-up system, if the Overfire Thermostat should ever fail to function properly the **OVERFIRE FUSE** will shut down all power to the control box. This condition will be indicated by the same red LED. In this case it will be necessary to replace the Overfire Fuse before re-lighting will be possible.

E. The **Solitaire** is protected from **power supply surges** or brown-outs by the **POWER SUPPLY FUSE**.

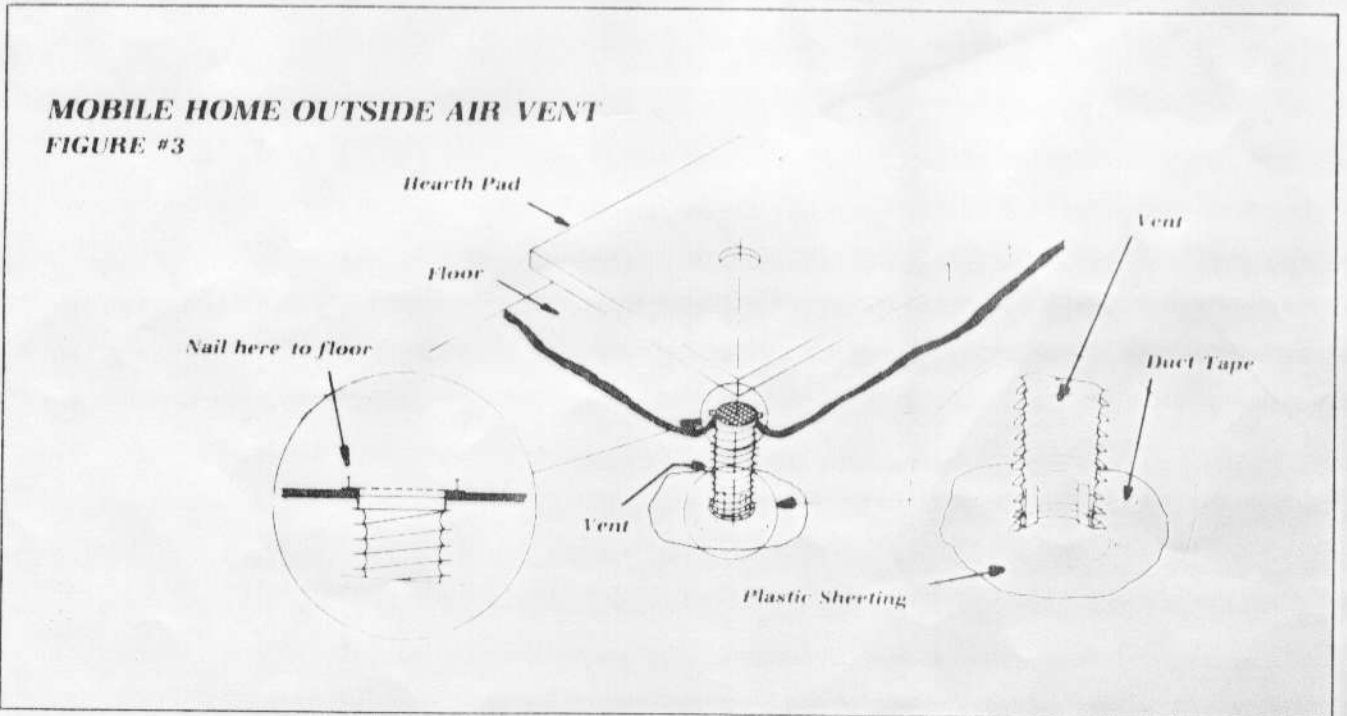
F. Both the *high* and *low* burn settings have a **FINE ADJUSTMENT CONTROL KNOB** with correspondingly labeled green LEDs. It's easy to tell which burn cycle the stove is in with just a glance at the green LEDs. The Control Knobs allow the operator to efficiently adjust combustion air to compensate for varying grades of fuel and different altitudes.

G. A modular, quick-connect plug allows easy repair or replacement of the controller system in the unlikely event that should be necessary.

H. A **STOP BUTTON** signals the *low limit switch* to stop the auger, which shuts off fuel to the firepot. Simultaneously, the Draft Inducer Fan is instructed to continue running until the system cools down.



MOBILE HOME OUTSIDE AIR VENT
FIGURE #3



CALIBRATION AND ADJUSTMENTS

After the **Solitaire** has been installed in your home, the draft inducer fan must be adjusted. To do so, set both knobs at their mid-point range, light the stove (see instructions for Starting) and set the wall thermostat to *high* heat. Allow the appliance to burn for at least 30 minutes. This will allow it to reach equilibrium. Now, turn the *high* heat knob slowly to the left until you begin to observe visible smoke, or rich/dirty-looking flames. This means the fire is not getting enough air. Turn the knob slowly back to the right until the flame becomes light in color but remains full and tall. The air-to-fuel ratio is now correct.

Next, set the wall thermostat so that the *low* heat light on the controller box is *on*. Allow the stove to burn for 30 minutes. Adjust the air using the same method as that used to adjust the high heat control knob just described above. Watch for that clean, light-colored flame which seems fairly full.

Because the rate at which pellets are fed into the firepot is not steady, you may notice the fire *cycling*. While this is normal, the

above adjustments should be made while there is a good flame present.

Once set, these two fan controllers need not be adjusted routinely. However, re-adjustment is recommended whenever the brand of fuel is changed, after annual inspection and cleaning, or if the appearance of the fire has changed noticeably.

Symptoms of incorrect adjustment are:

1. Air too low: visible smoke at the tip of the flames; rich/dirty looking flames, smokey glass on low burn.
2. Air too high: fire seldom fills firebox; very little flame; fire goes out.

Should readjustment be necessary, follow the same procedure described above. If you are unable to eliminate the symptoms of air being too low at either speed, refer to the Trouble-shooting section of this manual.

SAFETY TIPS

Always exercise caution when using your stove and keep the following pointers in mind:

1. Keep flammable materials and liquids away from the stove. Never use gasoline or other flammable liquids to start a fire.
2. A glowing red stove or exhaust vent is dangerous! **Do not** overfire your stove.
3. Keep all combustible materials, furniture, clothing, etc. at least three feet away from the stove.
4. Combustion air: Fire consumes oxygen, therefore a fresh supply of outside air must be provided in order to maintain a healthy atmosphere within the home. If your **PFA** was not installed with the *outside air supply kit* then open a window

slightly when operating your stove.

5. Burn only pelletized fuel of good quality, with few *fin*es.
6. Educate your children as to the dangers of fire, and the presence of the hot appliance. Never allow a child to operate your **PFA** appliance.
7. When disposing of ashes, **do not** place them in a combustible container! Place the ashes in a metal container with a tight lid. Move the container away from the house.
8. Inspect and clean your exhaust vent not less than once-a-year.
9. Smoke detectors are a very good investment for the protection of your family and home.

OPERATING INSTRUCTIONS

BREAKING IN PERIOD

The outside of your **Solitaire PFA** has a high-gloss baked finish to provide you with long years of care-free beauty. The internal surfaces have been painted with flat black stove paint. This paint may give off some odor and/or smoke during the first few fires. We suggest you open a door or several windows to provide adequate ventilation when burning your stove for the first time.

FUEL TYPES

Your **PFA** is designed to use quality, brand name pellets of consistent size, moisture content and densities. Other commercial brands may be used, however, efficiencies may drop and clinking may occur.

STARTING INSTRUCTIONS

Notice: Before starting stove, check hopper for pellets and fill if necessary; verify that the ash drawer is closed and sealed.

1. Turn on **MASTER SWITCH** (side controller panel).
2. Set wall thermostat so the *high* heat light is on.
3. Put in paper chips/starter material plus a small handful of pellets.
4. Light the starter at all four corners.
5. Keep the door slightly ajar and allow fuel to ignite well.
6. Once a good flame has developed (usually 2-3 minutes):

- a. Push the **START BUTTON**.
 - b. Close and secure the door.
7. The stove will run for six minutes. If the stove stops running after that time, push the **START BUTTON** once more and the stove will resume full operation.
 8. Once lit, set the wall thermostat to desired temperature.
 9. A **STOP BUTTON** will safely shut the stove off. All unburned pellets and flyash will be cleared from the firepot automatically. When the stove has cooled down a bit the draft inducer fan will shut itself off.

REFUELING WHILE THE STOVE IS BURNING

Notice: Although the hopper can be filled when the stove is on low burn cycle, it is recommended that the stove should be on the *high* burn cycle during refueling. This should eliminate the possibility of the firepot consuming the burning pellets before refueling is completed. (Remember that the auger stops feeding pellets to the firepot when the hopper lid is *open*).

1. Stand to one side of the stove when refueling as the ceramic window can be very *hot*, and therefore, dangerous.

2. Slide hopper latch to rear and open lid.
3. Load fuel in hopper.
4. Close hopper lid tightly. (make sure it latches)
5. The draft inducer fan will continue running when the hopper lid is open. This ensures that no smoke will be able to enter the hopper bin. However, since the fuel in the firepot continues to burn, and will be entirely consumed in about two minutes, the hopper lid should be closed as soon as possible to prevent the fire from going out.

SERVICE INFORMATION

ROUTINE MAINTENANCE

WARNING: Do not attempt to service your PFA's firebox when the stove is *hot*. Severe burns could result. Before servicing, push the stop button and wait until the stove cools down (at least 30 minutes).

Firebox — Ash should not be allowed to build up in the firebox above the level of the self-cleaning slots in either side of the stainless steel firepot. Excessive build-up reduces efficiencies and could cause the firepot to plug with ash and eventually would cause your PFA to malfunction.

Firepot — Once per week the firepot should be serviced. The service tool which is shipped with the PFA may be used to scrape any ash residue from the grates in the firepot, and from the slots at the sides of the firepot. Lift the "U" shaped metal plate which covers the *ash-dump* holes in the floor of the firebox, emptying ashes into the ash drawer.

Replace this cover plate and snug it up against the base of the firepot.

Ash Drawer — The ash drawer should be inspected and cleaned if necessary once every two weeks, depending on usage and fuel quality. An overfilled ash drawer may cause the stove to malfunction.

Ceramic Window — A damp cloth or paper towel may be used to wipe off the glass surface. **WARNING:** *Never attempt to clean glass surfaces when the stove is hot or burning!* Severe steam burns may result.

Door Gasket — Replace door gasket when it shows signs of wear or heavy compacting.

ANNUAL MAINTENANCE

Firepot — The gasket seal around the bottom edge of the firepot should be inspected for fraying or tears. If noted, replace with new gasket which has a *peel-n-stick* backing on it. Place the sticky side against the bottom edge of the firepot. Obtain this gasket from your local dealer.

Caution: *Do not* drop ash into the air channel which feeds up into the firepot.

Firebrick — Any broken or cracked bricks should be replaced. Obtain these from your local dealer.

Heat Exchangers — Easy access is provided by removing the firebricks along either side of the firebox. Brush off the heat exchange tubes with a wire brush or the service tool. Replace the brick in the appropriate brackets.

Clean-out Cover Plate — This "U" shaped piece of metal creates the seal between the firebox and the ash drawer area. Inspect for a good seal. If this plate is warped, replace it. Obtain one from your dealer.

NOTICE: Before servicing electrical components of your PFA, always disconnect the electrical power supply to the appliance.

DRAFT INDUCER FAN

Excessive soot or flyash on the impellers of the fan may cause the PFA to malfunction. To service the fan:

1. Turn off main power switch on controller and unplug power supply cord.
2. Remove flue adapter.
3. Remove seven screws which hold rear cover screen in place, and remove screen. (Use 5/16" hex driver).
4. Unplug the electrical supply lines which feed power to fan from the stove's wiring harness.
5. Remove the four mounting nuts located on the fan housing. (Use 7/16" wrench).
6. Lower the fan down and out the rear of the stove.
7. Use a pointed object to scrape all residue from the fan impellers and housing.
8. Apply two-three drops of quality, hi-temp Turbine oil to fan motor oilers ports. **Do not use** WD-40 or other penetrating oils!
9. Inspect and replace fan housing gasket if it shows signs of fraying or wear.
10. Assemble in reverse order.

CIRCULATING FANS

1. Turn off main power switch on controller and unplug power supply cord.
2. Remove the fan guards which are located low, on either side of the back of the PFA. (Use 3/16" nut driver). This gives access to the fans.
3. The oiler ports are located at the top outside edge of the fan motors.
4. Apply two-three drops of quality, hi-temp Turbine oil to fan motor oiler ports. **Do not use** WD-40 or other penetrating oils!
5. Replace both fan guards.

FLUE SYSTEM

It is best to have a professional service your flue. However, should you wish to perform this function, follow these instructions:

1. Shut your stove off and wait for it to cool down before attempting to service it.
2. At the outside storm cap, or *terminal end* of your vent system, remove the cap.
3. Brush any soot, flyash or residue from the cap and the entire length of the vent.

4. It may be necessary to disconnect the flue adapter (where the exhaust vent connects to the vent collar on the back of your PFA), in order to ensure that you have removed all residue and dust from the vent system.

5. Re-assemble the vent system carefully, making sure that you have done so without altering the clearances provided between the vent and any combustible portions of your home.

TROUBLE SHOOTING

Symptom

Probable Cause

Corrective Action

1. Won't start

- a. Not plugged in
- b. Control box fuse blown
- c. Control box unplugged from harness
- d. Control malfunction

- a. Plug in
- b. Replace (3 amp)
- c. Plug in
- d. See dealer

2. Fire goes out
(Won't stay lit)

- a. Hopper empty
- b. Hopper lid open
- c. Low limit switch faulty
- d. Auger set screw loose
- e. Control malfunction
- f. Overfire condition-red overfire light on

- a. Fill hopper
- b. Close hopper lid
- c. Contact dealer
- d. Tighten set screw
- e. See dealer
- f. Allow stove to cool down. Turn off master switch and back on to reset. If red light on overfire still exists, see dealer.

3. Pellets don't feed

- a. Hopper empty
- b. Hopper lid not closed
- c. Auger motor wire connector loose or disconnected
- d. Auger jammed

- a. Fill hopper
- b. Close lid
- c. Reconnect
- d. 1) Turn power switch off and disconnect power cord.
2) Remove fire pot
3) Pry jammed pellets out of auger chute with screw driver.
4) Remove pellets from hopper. Check inside hopper for foreign material other than pellets. Consult dealer.
- e. Tighten set screw
- f. See dealer

4. Dirty, sooty flame

- a. Deficient air
- b. Firebox door not sealed
1) Not closed
2) Gasket worn
- c. Ash drawer not sealed
1) Not closed
2) Gasket worn
- d. Over-full ash drawer
- e. Plugged fire pot
- f. Plugged draft inducer fan impeller
- g. Plugged air inlet
- h. Plugged flue
- i. Heat exchanger plugged

- a. Adjust air control knob
- b. 1) Close door
2) Replace gasket
- c. 1) Secure door
2) Replace gasket
- d. Empty ash drawer
- e. Clean fire pot (see Service Section)
- f. Clean impeller (see Service Section)
- g. Check for blockage
- h. Clean flue (see Service Section)
- i. If heat exchangers are never serviced over an extended period of time, they may start to plug. To clean, refer to Service Section.
- j. 1) Contact local dealer to replace gasket.
2) Tighten nuts
- k. 1) Remove obstruction
2) Check installation instructions
3) Accessories (local dealer)

5. Low flame

- a. excess air
- b. Hopper empty
- c. Poor grade fuel

- a. Adjust air control knob
- b. Fill hopper
- c. Use quality fuel

Symptom

6. Smoke into room

Probable Cause

- a. Ash drawer not sealed
 - 1) Gasket
 - 2) Not closed
- b. Over-full ash drawer
- c. Plugged exhaust vent
- d. Firebox door not sealed

Corrective Action

- a. 1) Replace gasket
- 2) Secure door
- b. Empty ash drawer
- c. Clean vent system
- d. Check gasket

7. Dirty glass

- a. Leak around firebox door
 - 1) Not closed
 - 2) Gasket worn
- b. Leak around hopper lid
 - 1) Lid not closed
 - 2) Damaged gasket

- a. Close door
 - 1) Secure door
 - 2) Replace gasket
 - 3) Clean glass
- b. 1) Close lid
- 2) Replace gasket

8. Ash build-up in fire pot

- a. Low air setting
- b. Poor grade of fuel
- c. Slots in firepot plugged

- a. Adjust air control knob
- b. Use quality fuel
- c. Unplug slots

DEALER SUPPLEMENT**PRESSURE GAUGE CALIBRATION**

Tools required: 5/16" nut driver, draft guage (one which records 0—1 inches of water)

On initial set-up of the **Solitaire PFA** the calibration of the pressure guage should be checked for proper adjustment.

To do this:

1. Remove the rear screen, locate vacuum port on rear portion of the draft inducer fan.
2. Attach draft guage's hose to this vacuum port, start the **PFA**.
3. Burn stove 60 minutes on *high* heat setting.
4. Slowly turn the **DRAFT ADJUSTMENT KNOB** until the draft guage reads 0.6—0.7 inches of water.
5. Similarly, adjust the draft guage's reading to 0.25—0.3 inches of water at the *low* heat setting.
6. Disconnect the draft guage hose from the vacuum port. Replace the rear screen.
7. The pressure guage is now properly calibrated.

GLOSSARY

Chimney or Exhaust Vent: A passage for exhausting combustion products of all types of fuel (residentially oriented) into the atmosphere without utilizing single wall chimney connectors.

Chimney Connector: The pipe which connects a fuel-burning appliance to a chimney.

Combustible Material: Materials made of or surfaced with wood, compressed paper, plant fibers, coal or other materials which will ignite or burn.

Creosote: The solid form of smoke condensate on the inside of the stove pipe or chimney. The fuel in a flue fire.

Hearth: The floor area within the fire chamber of a fireplace stove.

Hearth Extension: The non-combustible material covering the floor beneath the fireplace stove and extending in front and at the sides of the hearth opening.

9 PIN
MOLEX
PLUG

Back of Plug

1	2	3
4	5	6
7	8	9

1 - Black
2 - White
3 - Blue-gray
4 - Brown
5 - Red
6 - Orange
7 - Green

