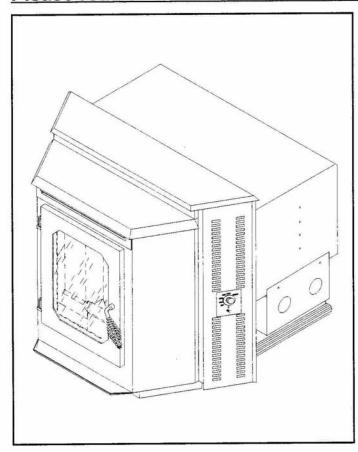


Pellet Insert Owner's Manual Installation and Operating Instructions

Please read this entire manual before installation. Save these instructions.



SAFETY NOTICE

- CAUTION: HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNERS.
- IF THIS HEATER IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT.
- CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.
- FAILURE TO COMPLY WITH OWNERS' MANUAL INSTRUCTIONS WILL VOID YOUR WARRANTY!

NOTE: This heater should not be installed in a bedroom or bathroom.

GENERAL INFORMATION

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

The EASYFIRE Pellet Insert has been designed and approved for burning wood pellet fuel only. Burning solid fuel in other forms is not permitted and will void all warranties.

This unit has been approved for use with a 3" Type L Pellet Vent System or Stainless Chimney Liner (4" on runs 10'and up).

NEVER use gasoline, gasoline-type lantern fuels, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire. Keep all such liquids well away from the heater while it is in use.

Ashes must be disposed of in a metal container with a tight fitting lid and placed on a noncombustible floor or ground, well away from all fuels, pending final disposal.

NOTE: During the first few burns the high temperature paint and sealant used in manufacture will emit some odor and smoke. Open doors and windows to the outside for proper ventilation during the first burn cycle and curing of the paint.

This heater, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the **National Electrical Code**, **ANSI/NFPA 70**.

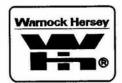
Provide adequate clearances around air openings into the combustion chamber and adequate accessibility clearance for servicing and proper operation. Never obstruct the front opening of the heater.

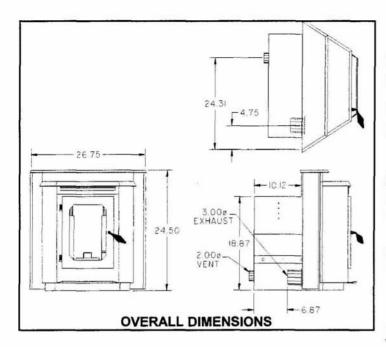
The heater may be installed in a factory-built fireplace or masonary type fireplace with a fully vented chimney. A non-combustible hearth must extend 6" beyond the front and 3" beyond the side of the insert.

CAUTION: Do not connect this unit to a chimney flue serving another appliance.

PLEASE LEAVE THIS MANUAL WITH THE OWNER!

Design Certified to ASTM Standards by Warnoch Hersey, Inc.





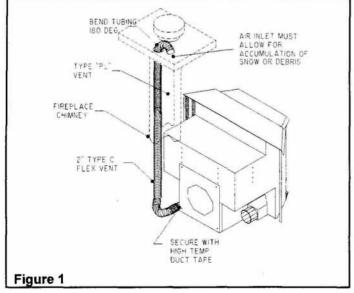
CLEARANCES

CHECK WITH LOCAL BUILDING OFFICIALS FOR SPECIFIC CODE REQUIREMENTS.
A LISTED, TYPE "L" PELLET VENT PIPE OR STAINLESS LINER IS MANDATORY ON ALL INSTALLATIONS.

WARNING: Installation of a Mobile Attachment Home Kit P/N 10413 and outside combustion air is mandatory in mobile or modular home installations although it may also be used in all residential applications. An outside air inlet MUST be provided for combustion and ventilation air. The air inlet must remain unrestricted while unit is in use. Outside air connection is located in the rear of the heater (Figure 1). Use conduit pipe or metal flex pipe and/or fittings to make the air intake hook-up.

Also, the structural integrity of the mobile home floor,

walls and ceiling/roof must be maintained.



Use only listed Type "L" pellet vent or stainless liner and components for installation. Failure to use listed components will void your warranty. See pipe manufacturer instructions for installation instructions.

OUTSIDE COMBUSTION AIR IS MANDATORY IN MOBILE OR MODULAR HOME INSTALLATIONS. SEE SECTION ON OUTSIDE AIR INSTALLATION.

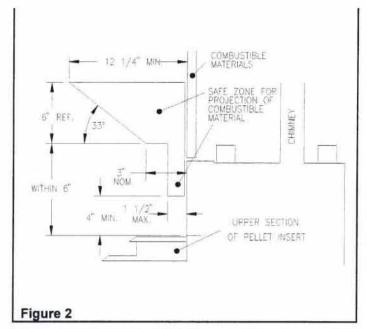
The pellet heater must be operated with a power source and will not operate using natural draft. If there is a power failure the heater will shut down. If the 12 volt back system is installed, the heater will automatically switch to 12 volt power.

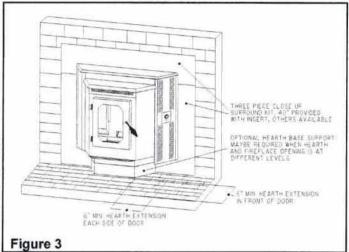
The EASYFIRE Pellet Insert has been tested and approved by Warnock Hersey, Inc. to ASTM, U.L., U.L.C., and EPA Standards.

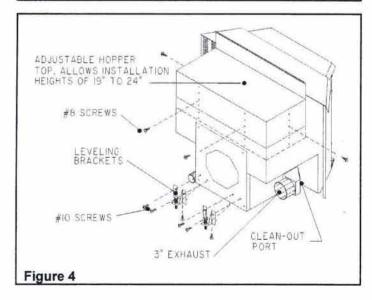
CAUTION: DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

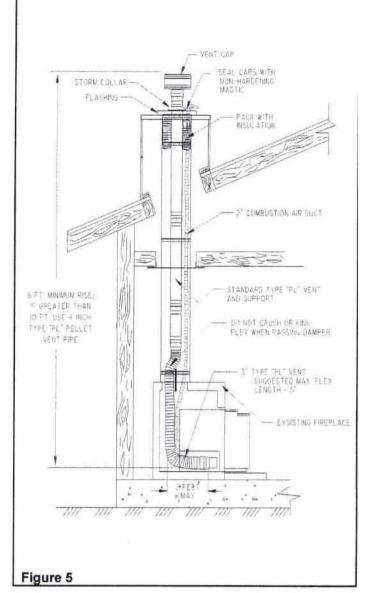
INSTALLATION

- 1. Clean and inspect the fireplace and its chimney for any structural defect that may cause any future problems. Secure gas piping that is installed with a cap and verify there are no leaks. Seal ash dump or any other access to the firebox area. Fix the damper in an open position or remove it as required for vent pipe installation.
- 2. Verify the required hearth and side clearances and clearances to mantels (fig. 2 & 3).
- 3. If the hearth and fireplace floor are not at the same elevation, leveling legs may be installed on the rear of the insert for distances of up to 1". For larger distances shiming maybe used using a non-combustible material. A hearth support base is available from your dealer for installations were the hearth is below the fireplace opening (fig. 3). NOTE: THE INSERT WEIGHT IS SUBSTANTUALLY FRONT HEAVY AND IF NOT FULLY SUPPORTED IT COULD FALL FORWARD.
- 4. Install vent system into exsisting chimney by using 3" flex from left side of hearth, passing damper and continuing to the top of the chimney. If the total vent length is longer than 10'install 4" vent from that point to top of chimney (fig. 5).
- Pack fiberglass insulation around the vent pipe and combustion air duct. Install a flashing cover over chimney. Secure flashing and seal as required. Install listed vent cap and secure.
- 6. Measure fireplace opening and adjust hopper top to the required level allowing for installation clearance. This is accomplished by removing the (4) #8 screws in the side and rear or unit and raising the top in 1" increments and installing the screws.
- 7. Slide insert into fireplace and center. Level as required than secure vent to outlet on left side of insert. Connect combustion air duct and secure. Note - For best insert operation the vent connection should not have any tight bends, rather a smooth sweep to the veritcal.









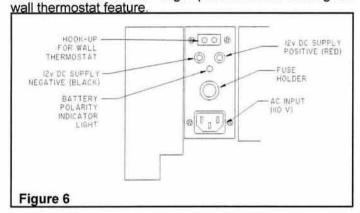
SURROUND INSTALLATION

The surround supplied with the insert is adjustable in height so as to allow for many installation perimeters.

- After the insert is in position, install left and right legs attaching them to the two side brackets using the (4) 1/4-20 bolts provided. The tinnerman nuts installed in the legs maybe moved either up or down to accomidate the installation.
- Slide the surround top panel between the hopper top and cover. Push the panel down until the screw holes align with the the side legs. Install the (4) #8 screws provided. Install power cord into the recptical on the right side of the insert. Route cord behind surround leg and out to a ground plus.

Wall Thermostat Installation:

The wall thermostat is designed to automatically regulate the room temperature from the High setting to the Low setting based upon room temperature. Remember to leave the control knob on the "High" position when utilizing the



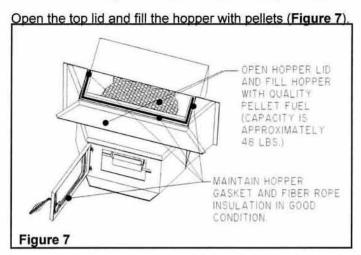
- The following is a step by step procedure for installing the optional wall thermostat. Note connection terminals on left side of unit at rear (see Figure 6). Use 18/2 thermostat wire for the installation.
 - a. Unplug heater from wall outlet!
 - b. Hook up thermostat wires to terminals (see Fig.6).
 - c. Locate thermostat approximately 10 to 12 feet from heater or in area that requires steady temperature.
 - d. Run thermostat wires from heater to thermostat along wall or under carpet etc. and hook wires to thermostat terminals. On new construction you can, of course, run wire in the walls before sheet rock or paneling is done.
 - Make sure all wiring is completed before plugging the EASYFIRE Heater back into the wall outlet.

IMPORTANT - Any electrical work performed on the EASYFIRE Heater should be done by qualified personnel.

START-UP AND OPERATION

1. Filling the Hopper and Start-Up:

CAUTION: Fuel hopper lid must be closed before operating unit. Maintain hopper seal in good condition. DO NOT OVERFILL HOPPER! The EASYFIRE will hold about 35 lbs. to 50 lbs. of pellets depending on hopper height.



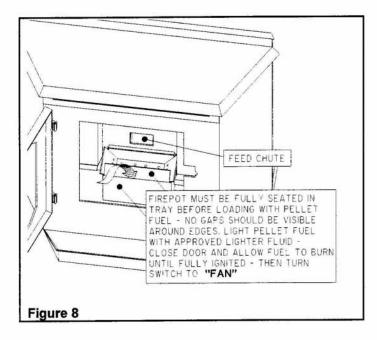
The quality of pellet fuel varies from brand to brand. This will affect the efficiency of your heater. We suggest that you try several brands until you find one that gives you a clean efficient burn. Poor quality pellets will burn rich with black soot and ash will accumulate quickly. Quality pellets will burn clean and ash build up will be minimal.

Make sure hopper lid is fully closed. Open the front door. Fill the Fire Pot with pellet fuel.

<u>IMPORTANT:</u> The fire pot must be seated flush and must sit even in the pot tray. Air leaking around the fire pot will create a poor burn (**Figure 8**). Light the pellets in Fire Pot using any approved lighter fluid.

Allow pellets to burn for approximately 1 minute, or until pellet ignition has been achieved. Close door and turn the control knob to the "FAN" position. When the pellets are well lit, turn the control knob to "LOW" or "HI". We recommend that you run the heater on "HI" for about 30 minutes in order to get the heat exchanger hot before turning it to "LOW". You will need to burn the heater for a few hours before deciding which setting is best for your particular needs.

Note: Caution must be taken when installing burn pot or operating door not to damage ceramic glass. Do not attempt to operate heater if glass becomes damaged in any way!



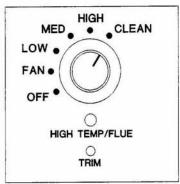


Figure 9

- 2. Control Functions: Control functions on the Easyfire are as follows: OFF, FAN, LOW, MEDIUM, HIGH, CLEAN. Here is how each function works:
- A. When the Control Knob is turned to FAN, a timer is activated and you will have about ten (10) minutes to get the pellets lit and reach a minimum temperature.

Should the pellets not light in the 10 minutes simply turn the knob to **OFF** and begin again. This will give you another 10 minutes to get the pellets lit. The reason for the timer function is so that the heater will automatically shut down if the fire goes out. Pellets do not feed in the FAN position.

- B. In the LOW position, the EASYFIRE will be feeding approximately 1 to 1½ lbs. of pellets per hour and the flame will fluctuate between 1" and 6" in height.
- C. In the MEDIUM position the EASYFIRE will be feeding approximately three (3) pounds of pellets per hour and the flame will fluctuate between 3" and 8" of fire.
- D. In the HIGH position the EASYFIRE will be feeding approximately 4 lbs. per hour and the flame will fluctuate between 3" and a full flame. The fan speed will increase accordingly as the heater automatically adjusts itself based on temperature inside the heater (see G below).

- E. The CLEAN position is to be used only when the heater is not burning and you wish to clean out the accumulated ash in the front of the fire area. See CLEAN OUT section of maintenance instructions.
- F. After the heater is running for several hours and you wish to turn it off simply turn the knob to OFF. The heater will continue running until it cools down and then will automatically shut itself down.
- G. <u>REMEMBER</u>: Each feed position will fluctuate because the microprocessor is automatically adjusting the feed and air based on temperature. This means the pellet feed rate and flame height will change accordingly based on quality of pellet and heat loss of dwelling.

OPTIONAL 12V HOOK-UP & OPERATION

- The EASYFIRE 12V back up can be purchased as an option and includes the following components:
 - a. Deep cycle sealed 12V battery.
 - **b.** Battery connector cables for hook-up to the heater.
- 2. In order to hook-up the battery and engage the 12V backup system simply connect red cable to red terminal on the heater (see Figure 4) and to positive connector on battery [the terminal marked (+)] and connect the black cable to the black terminal on the heater and to the negative connector on the battery (the terminal marked (-). If you hook up the cables backwards the red LED light above the terminal receptacles will come on. If hooked up properly this LED will glow green.

WARNING - MAKE SURE RED CABLE GOES TO RED TERMINAL (POSITIVE CONNECTOR) AND BLACK CABLE GOES TO BLACK TERMINAL (NEGATIVE CONNECTOR).

- If you decide to purchase your own 12V back up system
 we recommend a sealed gel cell battery. Failure to
 install the proper battery could cause physical harm to
 you and your property and will also void the heater
 warranty.
- 4. When the battery is properly connected and the heater plugged in, the following will happen automatically:
 - a. The heater will automatically switch to 12V power if there is a power failure, and switch back when power is restored.
 - b. The battery will be trickle charged as long as the heater is plugged into 110 AC wall outlet. Do not use extension cords. The trickle charge will not recharge a low or dead battery but it will keep a charged battery at maximum performance.
- If you choose to separate the battery from the heater by lengthening the cables you must make sure that the cable wire used will carry the current to the heater. For example, if the distance is 10 to 20 feet then 12 gauge wire must be used. Check with your local electrical professional to make sure you have used the proper gauge wire/cable.

MAINTENANCE PROCEDURE

CAUTION: Moving parts may cause injury, DO NOT operate with rear cover removed.

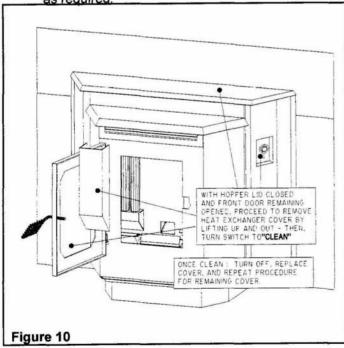
WARNING: Risk of electrical shock, disconnect all power before servicing.

ALWAYS TURN YOUR Heater OFF & LET IT COOL BEFORE CLEANING.

Your EASYFIRE Pellet Heater requires routine maintenance for maximum performance and is mandatory for the warranty to remain in effect.

The following procedures should be studied carefully and performed regularly as indicated:

- Fly Ash: Some ash will accumulate in the heat exchanger, firepot and flue and should be cleaned out on a regular basis for best efficiency and safety. When the heater is shut down and cold, you should:
 - a. Open door and remove clean out slide cover. To remove, simply slide up and out from retaining angle bracket (Figure 10). Clean one side at a time. With one slide cover removed, leave door open and turn control knob to the "CLEAN" position. Let heater run until ash in fire pot area is vacuumed out by heater fan. Turn off and replace cover. Remove remaining cover and repeat procedure for the other side. The vent pipe should be cleaned out after this procedure. Remove the clean-out port cover (fig 4.) and vacuum as required.



b. Remove firepot by lifting up and out, it may be brushed out or vacuumed. Firepot should be cleaned daily. Make sure holes in pot are not clogged. The area around and below the pot should be checked every five or six days depending on how many hours a day you are burning your heater and the quality of the pellets being burned. (After a few days you will

be able to determine the frequency needed for clean out.)

The important thing to remember is that excessive fly ash accumulation will affect the efficiency of the burn.

- c. Scrape pellet feed chute with putty knife to remove hardened material on which sawdust can accumulate.
- d. The clean-out port cover should be removed and the vent pipe checked every four to six weeks or whenever you utilize the clean out mode on the control dial.
- e. Fly-ash can also accumulate in the vent pipe and termination cap. Inspect exhaust system frequently to maintain free flow of exhaust fumes and fly-ash. The frequency of clean-out depends entirely on the quality of the pellets, so you will have to initially monitor the buildup in the pellet vent pipe.
- 2. Hopper Clean Out: Vacuum the accumulated saw dust in the hopper weekly. Keep free of debris and foreign material. AN ACCUMULATION OF SAW DUST CAN CAUSE IRREGULAR PELLET FEED. For best results this should be done on a regular basis depending upon how often the heater is used. If you burn the heater all the time you should do this every eight to ten days.
- 3. Cleaning the Exhaust Fan Blade & Heat Exchanger: The exhaust blower should be checked for excessive fly ash buildup. Regular and routine maintenance utilizing the CLEAN OUT feature will keep the exhaust blower housing and fan blades clean. This cleaning can only be done when the heater is NOT burning. For best results run the fan in the CLEAN OUT position with the door open for approximately one minute or until ash is no longer being picked up by the fan. Remember, you must always check the clean out cap on the tee after utilizing the CLEAN OUT feature.
- Keeping the Glass Clean: If soot deposits accumulate on the glass, clean with window glass cleaner and a paper towel when the glass is cold.
- Polishing the Gold and Chrome: All chrome and gold plating used on the EASYFIRE heater can be cleaned with a soft cloth and non-abrasive cleaner.
- 6. Cleaning & Polishing Gold Plated Parts: Gold is a soft metal and therefore a fragile surface. Prior to the first burn it is important to use Windex or comparable product and a soft clean cloth to wipe any marks off all gold surfaces or the heat will cause the marks to remain in the surface permanently. Always clean the gold surface when the heater is COOL.
- 7. Door glass replacement: Should the door glass become broken it may be replaced by scraping the sealer from around the outer edge of the glass. Carefully pry glass from door frame then clean all sealer from frame. Obtain a replacement glass from your local dealer and attach glass to door using High Temperature Silcon Sealer (min. 400 deg.F). Apply sealer to all four corners of the glass and set glass into frame. Apply sealer to mating edge of glass and frame. Allow two hours dry time before installing door onto heater. Note: Replace with Corning Pyro-Ceramic Glass only. Refer to parts list for specifications.

TROUBLE-SHOOTING

The following scenarios are provided in order to help you locate a difficulty if the heater performs in a manner which would seem to indicate a malfunction:

 Problem: I loaded the heater for start-up, lit the fire starter and pellets but the fire didn't keep going.

Solution: Check power cord to see that it is plugged in. Remember that the timer on start up runs about 10 minutes and if the heater has not heated up enough to deactivate the timer you will have to start over by turning the knob to off and then back to FAN or LOW.

The EASYFIRE will automatically switch to 12 volt backup provided you have the 12 volt option installed.

Problem: The heater was lit and burning properly, then suddenly it stopped feeding pellets.

Solution: a) Check pellet supply in hopper. If empty, fill and follow start-up procedure as outlined in the beginning of this manual. b) Occasionally, a foreign object, debris or an excessive amount of sawdust can enter the feed mechanism and jam the feed chute. If this happens, you must empty the hopper and check the feed chute to see what is causing the jam. Remove any foreign material or object and re-start the heater. **CAUTION:** Keep fingers and hands clear of feed mechanism when heater is on.

Problem: The fire was burning well and then it began to overfeed pellets and started backing up into the pellet feed chute, smothering the fire.

Solution: When the pellets are overfeeding, it usually means that the air flow has been reduced. Check the firepot air intake holes to be sure they are clear. Check to see if firepot was properly seated in pot tray. Check to see if the manifold may have filled with fly ash. If you use a low grade pellet, and clinkers (fused ash and dirt) form in the bottom of the firepot, it will choke the air intake (you might consider changing the brand of pellets to one that burns cleaner). You must let the fire go out before removing and cleaning the firepot.

Never vacuum out the heater when the heater is in operation! The hot ashes can lodge in your vacuum cleaner and cause a fire!

You must clean the manifold regularly in order to insure a good air to fuel ratio, thus allowing the heater to "breathe" properly. You must also check the vent pipe and tee to see that they are not clogged and full of ash.

Problem: Heater was burning well and then soot began forming on the glass door.

Solution: Black soot forming on the glass door means that the combustion is not right and the heater needs a good clean out. Some brands of pellets burn much richer than others and you might have to change brands of pellets and/or have the air/fuel settings re-adjusted by your dealer. It is normal to have the glass cloud up after several hours of burning but it should wipe off with a good window cleaner. If the glass turns black quickly, then the heater needs a good clean out.

Problem: We had a power failure and the heater emitted smoke for about five minutes.

Solution: If the heater emits smoke during a power failure, and you have frequent power failures then we suggest you purchase the battery back-up system. If the vent pipe is installed according to these instructions the smoke will syphon out of the pipe in most instances.

Problem: After several weeks of outstanding performance, the heater suddenly stopped and the red light under the control knob came on. This light is the Hi Temp/Flue Indicator Light.

Solution: The Hi-Temp/Flue Indicator light indicates that fly ash has built up in the exhaust system and/or there is a restriction in the exhaust/flue system. Check the pipe system for excessive ash and clogging, particularly the vent cap. Remove the clean out cap on the tee and make sure that ash has not blocked the exhaust air flow. This automatic shut down in case of flue clogging is a safety feature and if the shut down occurs it means you have a problem and should consult a service technician and/or clean your pipe and heater thoroughly. If you feel the fly ash build up is excessive, we suggest that you try another brand. In moist climates the pellets and fly ash can actually absorb moisture from the air and create creosote and a severe clogging problem. Keep this in mind when you store and handle your pellets. The heater warranty does not cover the quality of the fuels used or the way they may be handled either before or after you've purchased them.

Problem: I turned off the switch and the heater kept running.

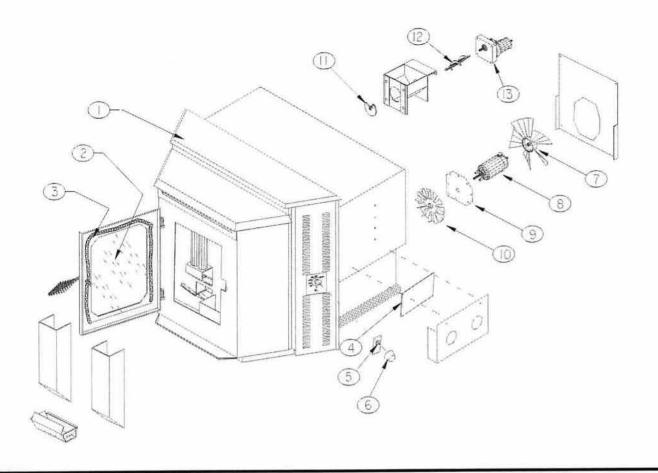
Solution: This is normal. The exhaust blower will keep running until it cools down and then it will automatically turn off. This can vary by the temperature the exhaust has reached and the temperature of the cooling air.

HI TEMP/FLUE AND TRIM INDICATORS:

When the Hi-Temp/Flue indicator light comes on (red lite beneath control knob) it means that the flue is obstructed or you have a reverse draft and gases cannot exit properly. Maintenance is required and a thorough cleaning and pipe check must be performed.

TRIM button: Underneath the control knob you will find a small round button that will turn forward and reverse. This button can control the feed motor in the LOW position only. By turning the button clockwise you can increase the feed on LOW and by turning it counterclockwise you can decrease the feed in the LOW position.

Move this button carefully! It is designed to fine tune your LOW setting in the event you change brands of pellets and/or live at a higher elevation.



ITEM No.	PART NUMBER	DESCRIPTION
1	100126	HOPPER LINER GASKET
2	110074	DOOR CERAMIC GLASS (Corning ceramic glass 9"x12"x5mm)
3	100125	DOOR FIBER ROPE GASKET
4	120038	CONTROL BOARD
5	120039	CONTROL SWITCH
6	110058	CONTROL KNOB
7	110070	CONVECTION FAN BLADE
8	110067	BLOWER HOUSING
9	110068	FAN MOTOR HOUSING
10	110070	COMB. FAN BLADE
11	200303	FEED SYSTEM DISK
12	300086	FEED SYSTEM AUGER
13	110059	FEED MOTOR



<u>EasyFire</u> <u>Pellet Heater</u> <u>Warranty Claim Form</u>

Customer Information:	Unit Information:
Name: Address: City/State/Zip: Phone:	RMA Number: Model Number: Serial Number: Date of Purchase:
Dealer Information:	
Name: Address: City/State/Zip:	Date:
Describe Defect:	
Describe Repair:	
Customer Verification: I verify that the above repairs were made to my EasyFire Heater	and that I am the original owner of the above model.
Customer Signature:	
Service Person Verification: I verify that the above repairs were made to the above EasyFire	Heater.
Service Person Signature:	***************************************
Distributor Authorization:	



5061 Brooks St. Montclair, CA 91763 Phone 1-909-399-3355 Fax 1-909-399-335 P/N 140152r1 8/0

EasyFire Pellet Heater Warranty Replacement Program

EFFECTIVE DATE: APRIL 1, 1993

NOTE: PLEASE READ THIS WARRANTY REPLACEMENT PROGRAM CAREFULLY BEFORE APPLYING FOR WARRANTY REPLACEMENTS OR CREDIT.

WARRANTY COVERAGE:

Warranted for five years from the date of retail purchase against defects in workmanship to include heater cabinet and body. Warranted for one year from date of retail purchase to include drive mechanism, electronic components, door glass, plating, and gasket. Solely for the benefit of the original purchaser. (Retain your dated sales receipt as proof of purchase.)

COVERED: Replacement of defective parts and labor, and product return to consumer.

NOT COVERED: Damages caused by abuse or failure to perform normal maintenance. Any other expense. This warranty shall not apply to any defect, malfunction or failure to conform with the warranty provisions if caused by damage (not resulting from defect or malfunction) due to unreasonable use by purchaser. **Consequential damages, incidental damages or incidental expenses, including damage to property. Some states do not allow the exclusion or limitation or incidental consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights which vary from state to state.**

QUALIFICATION FOR WARRANTY PERFORMANCE: Return product or defective part with proof of purchase and narrative description of defect together with your name and address, freight prepaid, to Empire Products, Inc.. Warranty Division, 10803 Fremont Ave., Ontario, California 91761. Returned part or product will be repaired or replaced at Empire Products' option and will be returned to you, freight prepaid, as soon as practical, but not later than 30 days after received.

WARRANTY WORK:

HEATER DURCHASE INCORMATION:

All warranty work must be authorized by the factory in advance of the repair and an authorization number assigned. A warranty claim form must be completed and signed by both the repair person and the customer. For prompt warranty service, please contact the authorized dealer in your area. Have the following information available to assist the repair person.

THE THE TENTON OF THE OTHER THOM				
DATE PURCHASED				
MODEL NUMBER	SERIAL NUMBER			
DEALER/RETAILER WERE PURCHASED				
The second secon	ACCOUNT OF THE PARTY OF THE PAR			
INSTALLER/CONTRACTOR USED FOR INSTALLATION				



5061 Brooks St. Montclair, CA 91763. Phone 1-909-399-3355 Fax 1-909-399-3357 P/N 140152r1 8/01