

## PROBLEMS THAT MIGHT POSSIBLY OCCUR

1. Smoke Puffs from the heater.
  - Check the chimney draft. With a good fire burning, the chimney should supply .06 inch water column updraft.
  - Check the flue pipe and chimney for possible creosote buildup. If so clean the chimney at once.
  - Check the ash pan and fire chamber for an overload or buildup of ash.
  - Check your chimney for down drafts. This is caused by air currents being deflected down the chimney from higher objects, such as trees, buildings, and hills. This problem can usually be corrected with an open vented chimney cap.
  - A chimney that is too cold will chill flue gases as they rise up the chimney. As this gas cools, it becomes heavy and other gases from the fire try to penetrate this heavy column of cool air. This results in back puffing, poor combustion, and may cause odors in your home.
  - Add more air to the furnace room. Your home may be so airtight that not enough air is reaching the fire.
  - Make sure the chimney clean out door is tightly
  - Other fuel burning devices connected to the same chimney may be robbing the needed draft for your Foxfire Add-On-Furnace. This situation should be corrected by your heating engineer.
2. Not receiving enough heat from your Foxfire Add-On-Furnace.
  - Make sure the twelve inch hot air pipe from your Foxfire Add-On-Furnace to the hot air plenum of your forced-air furnace, as well as the twelve inch hot air pipe joints are airtight.
  - Check to see if the blower and the limit control on your Foxfire Add-On-Furnace are operating properly and if the inlet opening of the blower is clean and not plugged.
  - The furnace room air may be inadequate, and it may be necessary to run a cold air return pipe to your existing furnace duct work system. See the separate section in this manual showing how this is done.
  - Check the type of wood being burned. If it is too green or is a type of wood that has a low heat value, the best designed Foxfire Add-On-Furnace cannot increase it.

## CHECKLIST FOR SAFE WOODBURNING FURNACE INSTALLATION

Before you start your first fire, check the following:

1. The furnace is located on a non-combustible floor.
2. A minimum of 18 inches exists between the furnace side, and 30 inches exists between the furnace back and a combustible wall.
3. Stove pipe of 24 gauge black pipe is used to run from flue collar to the chimney.
4. The flue pipe diameter is not reduced between the furnace and the chimney.
5. A cast iron damper is installed in the flue pipe within (2) feet of the furnace.
6. The total length of the flue pipe is less than 10 feet.
7. There is at least 18 inches between the flue pipe and any combustible wall or ceiling.
8. The flue pipe slopes upward toward the chimney and enters the chimney higher than the outlet of the furnace.
9. The flue pipe enters the chimney horizontally through a fire clay thimble or double wall insulated pipe.
10. The flue pipe does **not** extend into the chimney flue lining.
11. There is an airtight connection where the flue pipe enters the chimney.
12. A UL approved all fuel chimney is used where a masonry chimney is not available.
13. The chimney is in good repair, the flue lining is not blocked, and is cleaned.
14. A metal container with a tight fitting lid is available for ash disposal.

## **OPERATING YOUR FOXFIRE ADD-ON-FURNACE**

Your Foxfire Add-On-Furnace is a solid fuel burning device that is installed onto your existing forced air oil, gas or electric furnace system and is connected to a suitable Class "A" chimney. This will enable you to burn wood in place of oil, gas or electricity to heat your home.

Once your Add-On-Furnace has been properly installed these procedures are to be followed.

1. First open the cast iron damper in the 8 inch flue pipe to the chimney.
2. Next open the ash door and pull out the ash pan 2 to 3 inches.
3. Prepare to build your fire. Lay wadded newspapers inside the fire chamber on top of the grate, and place dry kindling on top of the paper.

### **CAUTION:**

**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.**

4. With the damper and ash door open, light the paper and close the feed door tightly.
5. Once adequate ignition occurs, fill the fire chamber with a charge of wood. (Keep the feed door and ash door closed tightly when the furnace is in operation.)
6. Adjust the damper to 1/2 to 3/4 closed and keep the ash door closed tightly. (Because of different chimney drafts, damper settings may vary.)

**NOTE:** Your Foxfire Add-On-Furnace is designed to operate with .06" water column up draft at the chimney connector. A qualified heating installer will be able to check your chimney draft. If your draw is too low (such as .02" or .03" w/c) you will get smoke back out of the feed door when you load the unit. If your draw is too high (such as .09" or .10" w/c) your fires will burn too hard and fast. If your draw is too low, you may have a problem with your chimney which must be corrected. This can be done in a number of ways, such as increasing your chimney height or with a power draft. See your local qualified heating installer for the best way to solve the problem. The same holds true if your chimney draft is too high. See your qualified heating installer.

7. Once your unit is in operation set the wall thermostat to the desired temperature as you would your oil, gas or electric furnace.

## **MAINTAINING YOUR FOXFIRE ADD-ON-FURNACE**

At least once a day take your poker and rake the ashes and coals across the grate. The finely powdered ashes will fall through the slots in the grate. Because the coals are larger than the grate slots, they will remain on the grate to continue to give off usable heat. The ash pan should be removed and emptied once a day also. Failure to clean out the ashes from the ash pan will lead to a buildup which will reduce the air supply to the fire resulting in a loss of heat output from the unit.

**NOTE:** 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 non-combustible 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.

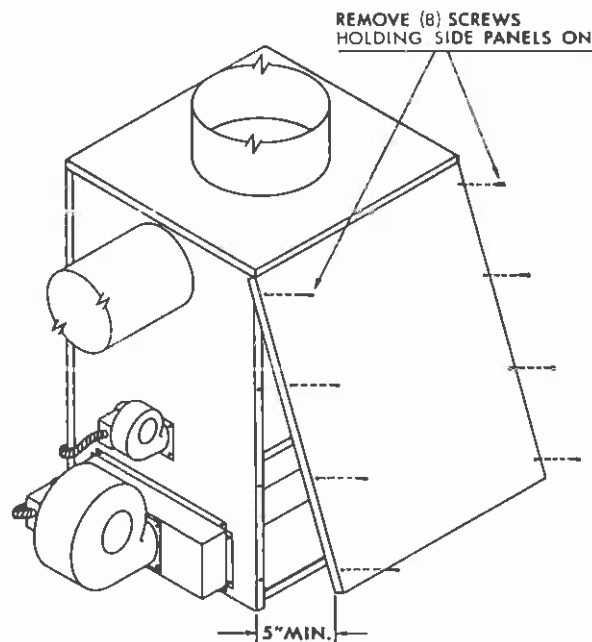
## HOW TO USE YOUR ADD-ON-FURNACE DURING PERIODS OF ELECTRICAL POWER FAILURE

If during operation of your Add-On-Furnace you have an electrical power failure the blowers on your Add-On-Furnace will not operate to push the heated air through your duct work system.

You should remove the screws holding the side panel that does not have the combination limit control on it. After you have removed the (8) screws, pull the bottom of the side panel out a minimum of (5) inches; as shown in the drawing.

By doing this you will help aid the flow of heat by gravity, to heat your home.

DO NOT operate the Add-On-Furnace with either the feed door or ash door open during electrical power failure or at any time.



## FIT OF FEED DOOR AND ASH DOOR

A tight fit of both the feed door and ash door on your Foxfire Add-On-Furnace is necessary to insure proper control of air intake to the fire. A loose fitting door may allow too much air to enter the fire chamber, causing an uncontrollable fire.

The usual cause of a loose fitting door is the deterioration of the 1/2" rope gasket in the door. To replace this 1/2" rope gasket, remove the old gasket and push the new gasket in the U shaped channel on the inside of the door. Most wood stove dealers stock this 1/2" fiberglass rope.

## THE BLOWERS

The blowers should be lubricated at the beginning and end of each heating season with SAE 20 oil. Frequently check the blower wheel, the housing, and the motor for lint and dust. Always keep these areas clean. To assure free air circulation, do not stack wood or other objects near the blowers.

## **SUMMER MAINTENANCE OF YOUR FOXFIRE ADD-ON-FURNACE**

During the summer months, preparing your Foxfire Add-On-Furnace for the future heating season will lengthen the life of your furnace investment.

~~First remove all ash from the fire box, ash pan, and ash pan compartment. Allowing ashes to remain in these areas when your Add-On-Furnace is not in use will cause rust and corrosion of the fire box.~~

~~Next paint the inside of the fire box and ash pan area with any type of oil, such as used motor oil, SAE 10 thru 50. This will help to prevent rust due to moisture from your chimney or natural condensation.~~

You should examine the outside of your Add-On-Furnace for any worn or burned off paint. If you find areas like this, lightly sand to remove any rust that may have formed and repaint with a high temperature paint, such as paint used on charcoal grills. Your wood stove dealer and most hardware stores stock high temperature paint.

## **ABOUT FIREWOOD**

For best results and a longer lasting fire, the heavier hardwoods such as ash, beech, birch, maple and oak are recommended. These hardwood species burn less vigorously and with a shorter flame than softwoods. Oak gives the most uniform and shortest flames and produces steady, glowing coals.

Softwoods, like pine, spruce, and fir burn rapidly with a hot flame and burn up quickly requiring frequent attention and replenishment. Because softwoods are resinous, they are easy to ignite for a quick warm up fire. Softwoods particularly pine have a tendency to create creosote because of the tar and pitch in the wood.

## **IMPORTANT WARNINGS**

"Heat savers" should not be added to the smoke pipe as they can be a source of creosote buildup.

Your Foxfire Add-On-Furnace is NOT designed to serve as an incinerator for trash and garbage, and is not to be used in this manner.

Driftwood that has been in saltwater should not be used. This type of wood can cause deep corrosive pits in the fire chamber and premature burnout can occur.

Rubber tires, creosote logs or artificial fireplace logs should not be used for fuel in your Foxfire Add-On-Furnace. Some log manufacturers use coal oil, paraffin, or other flammable liquids which may prevent the steady slow efficient burning and might be the cause of a chimney fire.

**NOTE:** For further information on using your heater safely, obtain a copy of the National Fire Protection Association Publication "USING COAL AND WOOD STOVES SAFELY" NFPA No. HS-10-1978. The address of the NFPA is 470 Atlantic Avenue, Boston, Massachusetts 02210.



# FOXFIRE

375 East Orr • Orrville, OH • 44667

Date Purchased \_\_\_\_\_ Serial Number \_\_\_\_\_

## Limited Warranty

The Foxfire furnace you have purchased are warranted by the manufacturer, to the original owner, against defects in materials and/or workmanship as follows:

The metal components and workmanship of the Foxfire furnace is warranted for one (1) year while personally owned by such purchaser, but does not include the paint on the surface of the product. Electrical components, blowers, and cast iron contained therein are warranted for one (1) year from date of purchase. Firebrick is warranted for ninety (90) days from date of purchase.

The warranty does not apply if damage occurs\* (because of accident, improper handling, installation, or operation, shipping damage, abuse, misuse, unauthorized repair or modification made or attempted).

This warranty means that this furnace will be replaced or repaired during warranty period at Foxfire's option. Only furnaces that prove to be defective will be repaired or replaced. If any furnace becomes defective during warranty period, send the furnace freight pre-paid to our address.

**\* \* \* All liability for any and all consequential damages is disclaimed and excluded herefrom \* \* \***

(Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.)

This warranty gives your specific legal rights and you may also have other rights which vary from state to state. This warranty is void if you do not return the card within thirty (30) days after the date of purchase.

\*A term required by federal law.

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