



Hand Fired Fireplace Insert

Operating instructions and maintenance enclosed
Thoroughly read and understand instructions
Always leave this manual with stove owner

Follow the instructions within this manual. If instructions are not followed, a fire may result causing property damage, personal injury, or even death.

A carbon monoxide detector has been supplied with your stove. You must plug it in.

Danger risk of fire or explosion. Do not burn garbage, gasoline, drain oil, or other flammable liquids. Do not use chemicals or fluids to start fire.

Burn Nut anthracite coal only

Stoves surfaces may be hot while in operation. Keep children away. Do not touch during operation

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

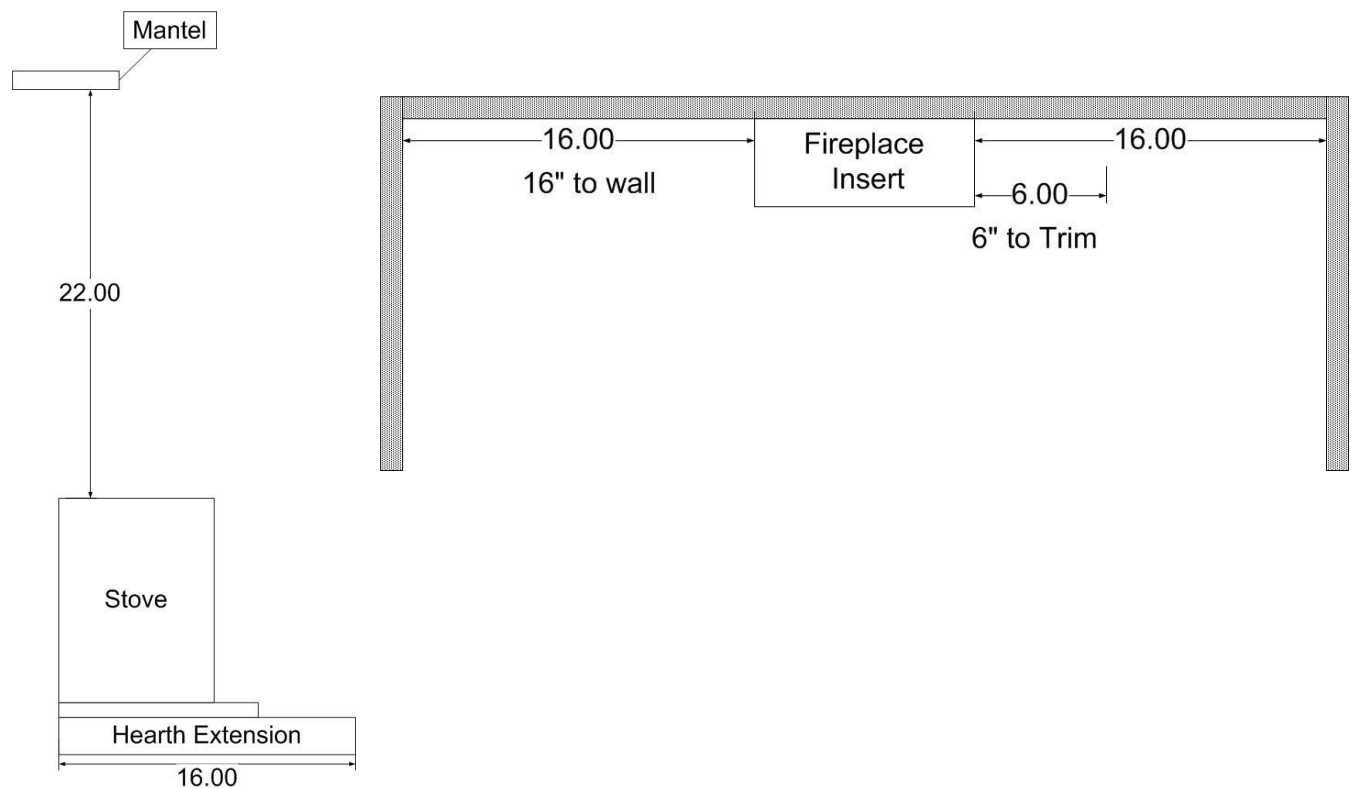
Follow all local building and Zoning ordinances

KEYSTONE FIREPLACE INSERT HAND FIRED INSTALLATION INSTRUCTIONS

Your Keystone Hand Fired Fireplace Insert Stove is designed for safe, efficient, and economical operation. It has been safety tested by Arnold Greene Testing Laboratory to UL 907 standards. With proper use and maintenance, you will enjoy many years of low cost heating comfort.

Proper installation with clearances from combustibles to stove is critical for safety.

Clearances refer to the distance of empty space between stove and any material that will burn. For your safety and protection all clearances as stamped on stove must be strictly adhered to.



**CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS
REGARDING RESTRICTIONS AND INSTALLATION INSPECTION IN
YOUR AREA.**

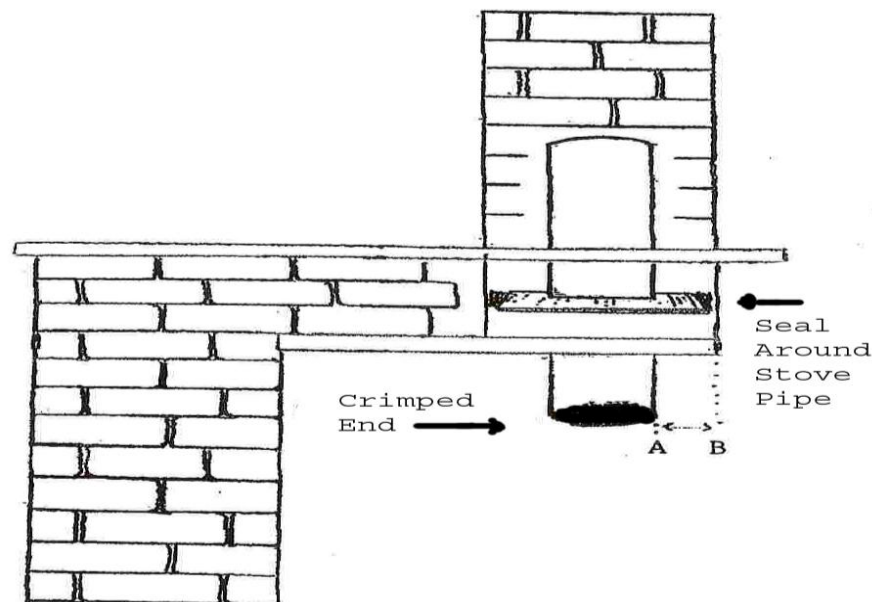
An approved protector or non-combustible pad **must be placed** under the stove. If stove is installed on a combustible surface, the floor protector must extend 16" beyond front of stove and 8" beyond both sides and rear of stove. A carpet may **not** be left under floor protector.

Keep furniture, curtains, drapes, papers, and other combustibles a safe distance from stove.

Contact your local building code officer about chimney inspection or any other ordinance restrictions.

The stove may be placed closer to a wall – if it is non-combustible or if wall is protected by a U.L. approved wall shield.

Your KEYSTONE FIREPLACE INSERT has been carefully designed to burn coal. **DO NOT** burn other fuels or trash.



**STOVE MUST BE CONNECTED TO CHIMNEY AS INDICATED ON
DIAGRAM**

Insert a flexible stainless steel pipe or enough 6" 24 gauge black stove pipe (stainless steel recommended) to enter at least the first tile of flute liner. Seal remainder of opening with metal plate and/or insulated with fiberglass insulation (without paper backing) to affect an air tight seal.

Place stove on Hearth, slide stove back into fireplace for connection to pipe (see note 1 pg3). Ease pipe down to connect onto stove outlet (plate where stack is to slide into is adjustable and can be slid forward or backward).

Stove must be connected to a masonry chimney or an approved prefabricated metal chimney. Stove is not to be connected to a chimney serving another appliance. Check local building codes.

Special methods are required when passing through a wall or ceiling. Check local building codes. All connections and joints should be secured by using 3 screws in each joint.

Your stove is supplied with a convection blower. When stove is in operation the convection blower **must run** all the time. Make sure power cord for blower does not come in contact with hot stove.

Note 1: Measure from face of fireplace to stove pipe in chimney. Point A to point B. Refer to diagram on page 2.

Place adjustable stove pipe connector on top of stove. Measure from 6" hole in connector to edge of Fire Box Chamber, Point C to point D. Refer to diagram on page 2. Slide adjustable stove pipe connector so that C to D equals the same distance as A to B.

Be certain to place adjustable plate on stove so that 6" extension nipple enters into stove. Secure sliding plate to top with screws

Crimped end of stove pipe should enter into stove exhaust outlet.

Slide stove into fireplace, chimney and stove outlet should now be aligned. Open fire door, remove baffles from stove, and reach through stove into chimney and pull stove pipe into stove outlet. Place baffles back into stove.

NOTE: Hot coals may **NOT** be allowed to burn above stove fire brick. Fire brick is designed to contain fire. Hot coals above fire brick may cause permanent damage to the stove. When fire bed becomes too high it is time to shake down ashes into ash pan. The fire maybe raked until hot coals fall into ash pan, hot coals burning on grates will cause overheating of grates and reduce the life. Leaving a thin layer of ash on grates will protect grates and extend life

DO NOT allow ash pans to become too overfull. This will reduce air flow through fire and cause poor burning of coal. **DO NOT** allow ash accumulation closer that

2" below shaker grates. After raking fire, ashes should be allowed to cool inside stove before removing ash pan. Never discard ashes into a combustible container. Burning coal may stay hot for hours. Always wear gloves while removing ash pans. Ashes should always be removed before shaking grates.

OPENING ASH DOOR TO BURN FIRE FASTER CAN CAUSE OVERHEATING OF STOVE AND VOID WARRANTY. If stove or stove pipe glows red, stove is over-fired. Close off all combustion air intakes in ash door and allow stove to cool down.

DURING NORMAL OPERATION FIRE DOOR and ASH DOOR MUST REMAIN CLOSED.

Annual cleaning and maintenance should be done at the end of each heating season. Brush interior sides and top of stove, remove baffles and brush off. Also inspect chimney. If you have purchased a 320CFM convection blower, oil motor with #20 non-detergent motor oil. Clean fan blades and screen.

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IMPORTANT: To prevent damage to blades on convection blower, convection blower must run at all times while the fire is lit.

TIPS ON STARTING A HAND-FIRED ANTHRACITE STOVE

DO NOT USE AN ACCEXERANT SUCH AS: gasoline, kerosene, litter fluid, or etc.

Take about eight sheets of newspaper, crumble into balls and place on top of grates. Next, lay fine kindling on top of the paper. This kindling must be dry and no larger than 3/4" in diameter. Layer the kindling in a criss-cross fashion to allow for good air flow. Open the draft control fully and light the paper just inside of the door. Now close the loading door and allow the kindling to catch fire. After a few minutes, open the loading an inch or two for a few seconds before opening completely. This method will allow smoke to clear away from the door opening before the loading door is completely opened.

Add small, compact pieces of hardwood when the kindling is burning hot. Keep the draft controls fully open to establish a hot fire quickly. The ash door may also be opened during start-up to accelerate the initial burn. When a substantial bed of red wood coals is built up, start adding coal (pea or nut is preferred over stove when starting) small amounts at a time. Keep the draft control open.

Continue adding small amounts of coal until there is a solid bed of burning coal. **DO NOT** add too much at one time. Allow sufficient time between each small loading (at least 5-10 minutes), so that each loading has time to ignite thoroughly before the next load is put in. When a substantial bed of burning coals has been established, fill the stove to the top of the fire brick. A deep bed of coal will burn more satisfactorily than a shallow bed.

When most of the wood is burned and the coal is completely ignited (usually 5-10 minutes or less after filling the stove), the draft control should be turned down to the proper operating level. If the ash door has been opened, it must be closed to prevent overfiring, which can cause dangerously high temperatures.

Shaking

Shaking should only be done when the stove has a hot fire.

The frequency of shaking will depend on the type of stove and the degree of burning. Shaking should be done at least once a day, but factory recommends twice a day.

Best results from shaking with most grates will occur if short, “choppy” strokes are used rather than long, even strokes. The amount of shaking is critical. Too little or too much, can result on the extinguishing of fire due to air flow, the proper amount normally occurs when red coals first start to drop through onto the bed of ashes.

LOADING

Coal should never be added unless there is a reasonable hot fire. The coal bed should be bright and vigorous. If the fire is burning hot and there is a deep bed of coals, full loads of coal can be added at any time. However, if there is not a deep bed of coals, it is best to add small amounts of coal at first.

INCREASING HEAT FROM A LOW FIRE:

Every effort should be made not to let a coal fire burn too long so that the fire has started to die. This will cause the reloading process to be much longer and there is a good possibility of losing the fire.

DO NOT shake or stir with a low fire.

Open the draft control wide or open the ash cleanout door to get the maximum draft.

Run the stove with the draft control or ash door fully open until the fire is reasonably hot.

Start adding small amounts of coal. When the new coal is thoroughly ignited or there is a substantial bed of hot coals, the stove may be shaken. Be sure to shake down all ashes, but DO NOT over shake.

DRAFT CONTROLS

The heat output of the coal is controlled by the primary draft control, usually found on the bottom of the door. Experience will dictate the proper settings for heat requirements.

Coal responds very slowly to changes in the draft settings. Due to this slow response time, over-correcting is a common problem. When changes in heat output are needed, make only small changes in the draft setting and wait for the temperature to stabilize.

ASHES

Ashes should never be allowed to accumulate in the ash pit so that they in any way impede the flow of combustion air to the fire. Excessive ash accumulation can cause the fire to go out and also can cause severe damage to the grates because of the absence of a cooling flow of air beneath them. 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 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 remain in the closed container until all cinders have thoroughly cooled outside of the dwelling.

CAUTION: ASHES SHOULD NEVER BE ALLOWED TO ACCUMULATE ABOVE THE TOP OF THE ASH PAN. ASHES IN CONTACT WITH THE BOTTOM OF THE GRATES ACT AS AN INSULATOR, INTENSIFYING THE HEAT ON THE GRATES AND COULD CAUSE THEIR WARPAGE. WITH AN EXCESSIVE BUILD-UP, PRIMARY COMBUSTION AIR IS RESTRICTED; THEREFORE, THE UNITS OUTPUT COULD BE GREATLY REDUCED.

Note: GRATES WARPED IN THIS WAY ARE EASILY RECOGNIZED BY THE EXTREME DAMAGE CAUSED TO THE GRATES.

SAFETY

Burning coal generates carbon monoxide.

Whenever a loading door is opened, it always should be cracked slightly to allow oxygen to enter and burn any combustion gases that are present before fully opening. Failure to do this may result in sudden ignition of the unburned gases when the door is opened.

A stove should never be filled with excessive coal, in that the flue gas exit is blocked or impeded in any way. If the flue gas exit is blocked, the carbon monoxide can be forced out of the stove into the room, with possible fatal consequences.

U.S. ENVIRONMENTAL PROTECTION AGENCY

COAL-ONLY HEATER

This heater is only for burning coal. Use of any other solid fuel except coal ignition purposes is a violation of Federal law.

THIS HEATER COMPLIES WITH FEDERAL REGULATION 40 CFR 60.
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WARRANTY

Five year pro-rated warranty on stove body.

One year warranty on blower.

One year warranty on grates.

NO warranty on glass.

NO warranty on paint.

OVERFIRING OF STOVE SHALL VOID ALL WARRANTIES

Keystone Manufacturing Company extends the following warranties to the original owner from the date of purchase.

Warranty does not apply if damage occurs because of improper handling, operation, abuse, rust, corrosion, misuse or use beyond rated capacity.

This warranty does not apply if the product has been altered in any way after leaving the factory.

All warranty claims should be made through dealer where the appliance was originally purchased. Model and original copy of the sales receipt need be presented to dealer.

If a consumer chooses to make a warranty claim directly through Keystone Manufacturing Company model, and copy of the original sales receipt are required. Customer must provide a credit card which will be charged for the full retail price for the product plus shipping and handling. When defective part is returned to the company and found to be a defect within warranty period the consumer's credit card will be credited back the cost of part.

Keystone Manufacturing Company assumes no responsibility for any labor expanses, for service, product removal, reinstallation or any freight charges for parts returned to the company.

If defective in material or workmanship and if removed by the owner with in warranty period Keystone manufacturing will at their opinion repair or replace the product.

This warranty is limited to defective parts, repair, or replacement at our opinion and excludes any incidental and consequential damages connected there with.

Warranty exclusions, labor, glass, door gasket, ash tub, and paint

Stove Information

Dealer_____

Date of purchase_____

Stove Model_____