



WESO Ceramic Tile Stove Operation Manual

Ceramic Radiant Heat Limited Warranty

Your WESO Ceramic Tile Stove has been carefully inspected before shipment. We will replace any part which is defective in material or workmanship, free of cost, for a period of one year from date of purchase. If defect is discovered, please contact Ceramic Radiant Heat Co. for instructions regarding return and replacement of affected part.

You may also return your WESO stove for full refund of the purchase price, if you do so within 30 days of delivery. Please contact Ceramic Radiant Heat Co. for instructions regarding return.

This Warranty does not cover damage while stove is in transit. If such damage occurs, owner should file a claim with carrier at once. This Warranty does not cover damage caused by abuse if stove is used contrary to instructions set forth in this Operation Manual. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.) This Warranty is non-transferable.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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Division of Texknit
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Sole importer and distributor
of WESO Ceramic Tile Stoves
in USA/Canada

Thank you for your confidence in the WESO Ceramic Tile Stove and in us, as expressed through your order.

Your purchase truly represents a lifetime investment. With proper care and maintenance, your WESO stove will perform at maximum efficiency and retain its splendid appearance for many, many years to come.

Please examine your WESO stove immediately for any damage that might have occurred in transit. Your stove was carefully inspected and securely crated by our shipping department to withstand the normal rigors of trucking. If you find it has been damaged in transit, you should file a claim with the carrier and notify us at once, in accordance with the instructions on the Shipping Notice you received from us earlier.

As you examine your stove's tiles you may notice tiny, barely visible lines that you might suspect are cracks in the surface of the tile glaze. Called **craquelé**, these "cracks" are characteristic of hand-glazed tiles and in no way represent damage or defects.

Also, as we pointed out in the earlier literature you received, the tile color of your stove may vary to a slight degree from that shown in our color brochure. The tiles for the WESO stove come from several sources in Germany and Austria where skilled artisans color, glaze and fire them by hand. Thus minor color variations are inevitable.

Your WESO stove is protected by the Limited Warranty appearing on the facing page. In addition, we wish to assure you that we will continue to be available to answer your questions regarding installation or operation, or otherwise help you as best we can with any matter relating to your stove.

1. The WESO Ceramic Tile Stove: Set-up and Installation

Uncrate the cast iron burning unit first, taking care not to cut your hands on the metal strapping. You'll need help to move it; this unit alone weighs 310 lbs.

Uncrate the three tile sections and lift them **carefully** from their container. Fol-

low the assembly instructions in the captions to the photos below.

Installation: Safety is the critical factor

Where should you situate your stove to do the job you expect from it?

The WESO stove is capable of keeping a living area of approximately 1200 sq. ft. comfortably warm through cold winter days and nights. Generally speaking, your stove is capable of serving two or three adjacent rooms as long as air is permitted



Loosen nuts and washer at bottom of each side tile section, and remove nuts and washer at top. Insert bottom bolt in slot at base of firechamber.



Insert top bolt in slot. Be sure tile frame fits securely and is lowered as far as it will go. Tighten top nuts with wrench provided (not too tightly!).



To attach top grille, insert pin affixed to grille into its metal receptacle on stove top to form one hinge. Tap it lightly with a hammer to secure it.



Insert loose pin into hinge and receptacle as shown. Tap in with hammer. With grille raised, carefully slide on the top tile section.

to circulate freely throughout.

Where you place your WESO stove also depends, of course, on where you have an operating flue. **BUT FIRST, be sure to determine whether your chimney is safe to accept the WESO — or indeed any woodstove.**

To avoid any doubt at all about your chimney's safety, ask an official of your local fire department to make a chimney inspection and consult with your local building inspector, who will advise you about compliance with local building codes and safety regulations.

Indeed your local ordinances or state laws may already require you to have not only the chimney but also the stove installation inspected by the fire department (fire marshall) and/or building inspector.

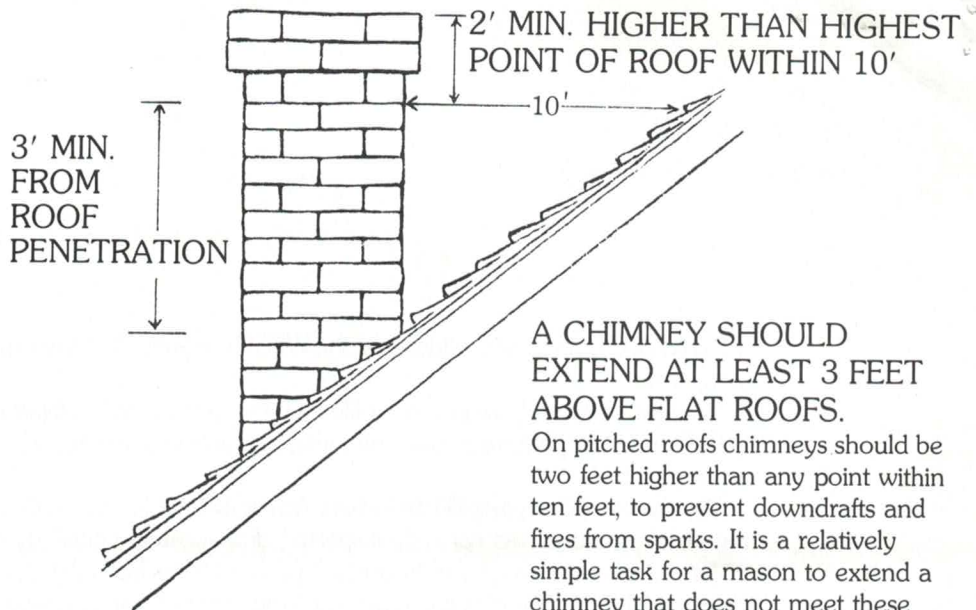
Not to comply with such laws, ordinances, regulations or codes may void your fire insurance protection; therefore, consult also with your insurance agent and/or landlord, in case you are renting.

If you have a **prefabricated** chimney, it should be approved by a national testing service such as Underwriters Laboratories. Triple-wall prefab chimneys have a reputation for building up creosote more rapidly than masonry chimneys.

If you have a **masonry** chimney, it should have a tile liner in good condition. Old chimneys without liners are dangerous for use with a woodstove. They are the cause of many fires.

Look up or down into the chimney flue with a flashlight; the flue liner should appear smooth and uniform. Check for loose mortar by scraping between the bricks. If the mortar crumbles easily, you will need to have the bricks repointed, the old mortar scraped out, the bricks removed, new mortar installed, then the bricks replaced. If you are concerned about your chimney's condition, install your WESO, build a small fire and in the presence of a member of your local fire department, check all chimney surfaces for smoke leaks.

If your chimney has a clean-out door in the basement, air can enter at that point — a danger if you should ever have a chimney fire. As a safety measure, it would be a good idea to seal off this door with mortar or putty in order to make it air tight.



Minimum recommended chimney clearances

If you are **building** a chimney, many authorities would recommend you invest in a masonry structure. Masonry has the capacity to store excess heat and temper the interior environment and tends to be more durable than prefabs.

The final area for inspection is **chimney height**. The top should extend at least three feet above flat roofs. On pitched roofs chimneys should be two feet higher than any point within 10 feet, to prevent downdrafts and fires from sparks.

While you may feel we are presenting you with a complicated and expensive set of difficulties, it's likely that your present chimney system can accept the WESO with little or no modification. **HOWEVER**, a safe operating chimney is a "must" and for reasons noted well worth your time and attention. Your chimney should be cleaned periodically, either by you or a chimney sweep. And do not connect any other appliance to the flue used by your WESO stove.

When in doubt, always seek professional help and advice.

How close to the wall?

When setting up your stove, we recommend that the flue pipe connection be as short as possible. You can vent your flue pipe right into the chimney; in any case the use of elbows should be kept to a

minimum.

Many local ordinances state that a woodstove should not be placed closer than 36" to a combustible wall — as close as 18" if an asbestos millboard shield is placed 1" away from the wall — as close as 12" if a 28 ga. sheet metal shield is placed 1" away from the wall. We defer to local regulations in your area. Because the WESO has a rear-mounted heat shield, it may be permissible to place the stove as close as 24" to a combustible wall. You can place your WESO as close as 3" to a masonry or cement structure in good condition. (See top of next page for full specifications.)

Standard 6" diameter 24-gauge flue pipe, readily available in hardware stores and stove-supply shops, will fit the flue collar on the back of the stove—there's no need for a metric adaptor. The centerpoint of the flue collar is 24½" from floor level. However, you can adjust the stove height if necessary by removing the lower hemisphere from each of the four legs, which will lower the stove 1⅞". This may be desirable in order to vent the stove into a fireplace.

Horizontal portions of that stovepipe should rise at least ¼" per foot. Avoid running stovepipe through a wall; if you must, obtain an insulated wall thimble from your hardware store. **Never** use stovepipe in

The WESO Ceramic Tile Stove may be installed as close as 24" from an unprotected combustible new wall and 9" from the side walls as per UL-1482 testing.

If a combustible wall is protected by 28 gauge sheet metal or 1/4" asbestos millboard spaced 1" from the wall, the stove can also be placed 11" from the rear wall.

The size, thickness and gauge of the chimney and connector should be 6" - 24 gauge.

NO CHIMNEY FLUE WITH AN INSIDE DIAMETER OF LESS THAN 6" IS PERMISSIBLE.

We caution the use of Type B gas vent piping. The use of such a Type B gas vent for solid fuels is unsafe and prohibited by the National Fire Protection Association Code.

place of an outside chimney — creosote can build up rapidly and wind and rain may soon corrode the pipe. Secure stove-pipe connections with screws to prevent them coming apart when in use (at which time the pipe would be too hot to handle).

You will not need to insert a damper in the pipe, since the stove itself controls the combustion level and smoke output. If you are installing your WESO stove in front of a fireplace, it will perform with greatest efficiency when you install a sheet-metal shield in place of the damper. Use caulking to create an airtight seal.

Protect Your Flooring!

The WESO radiates relatively little heat downward compared to other stoves, since the firechamber is located above the ash pan and the primary air enters from below. But stray sparks and embers that might fall out when you load the stove could present a problem.

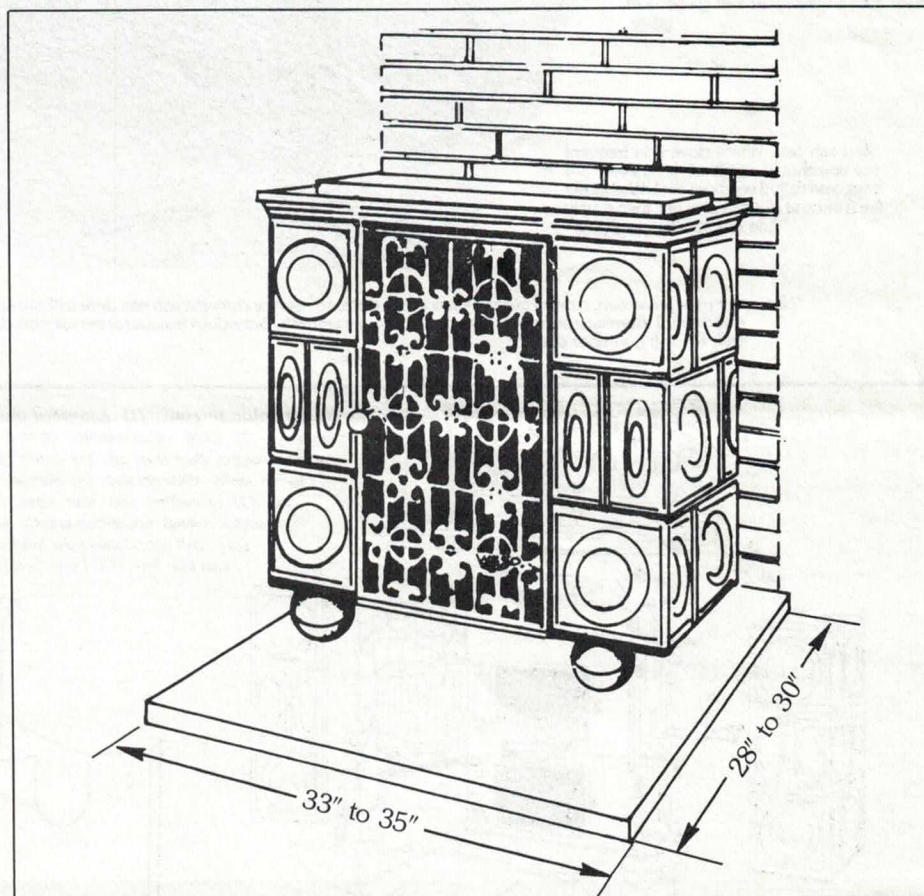
Unless your WESO stove will rest on a tile, cement or masonry floor, it is important that you place it on a fireproof surface. Ideally this should be 24 ga. sheet metal, sheet metal on asbestos millboard, or sheet metal on masonry. Minimum measurements of the floor heat shield are indicated below:

The minimum area to be covered by floor protection should extend 16 inches in front of the door and 8 inches on both sides of the **door** under the

heating unit and 2 inches to either side of the chimney connector and under it, protecting the total area beneath and aside as noted.

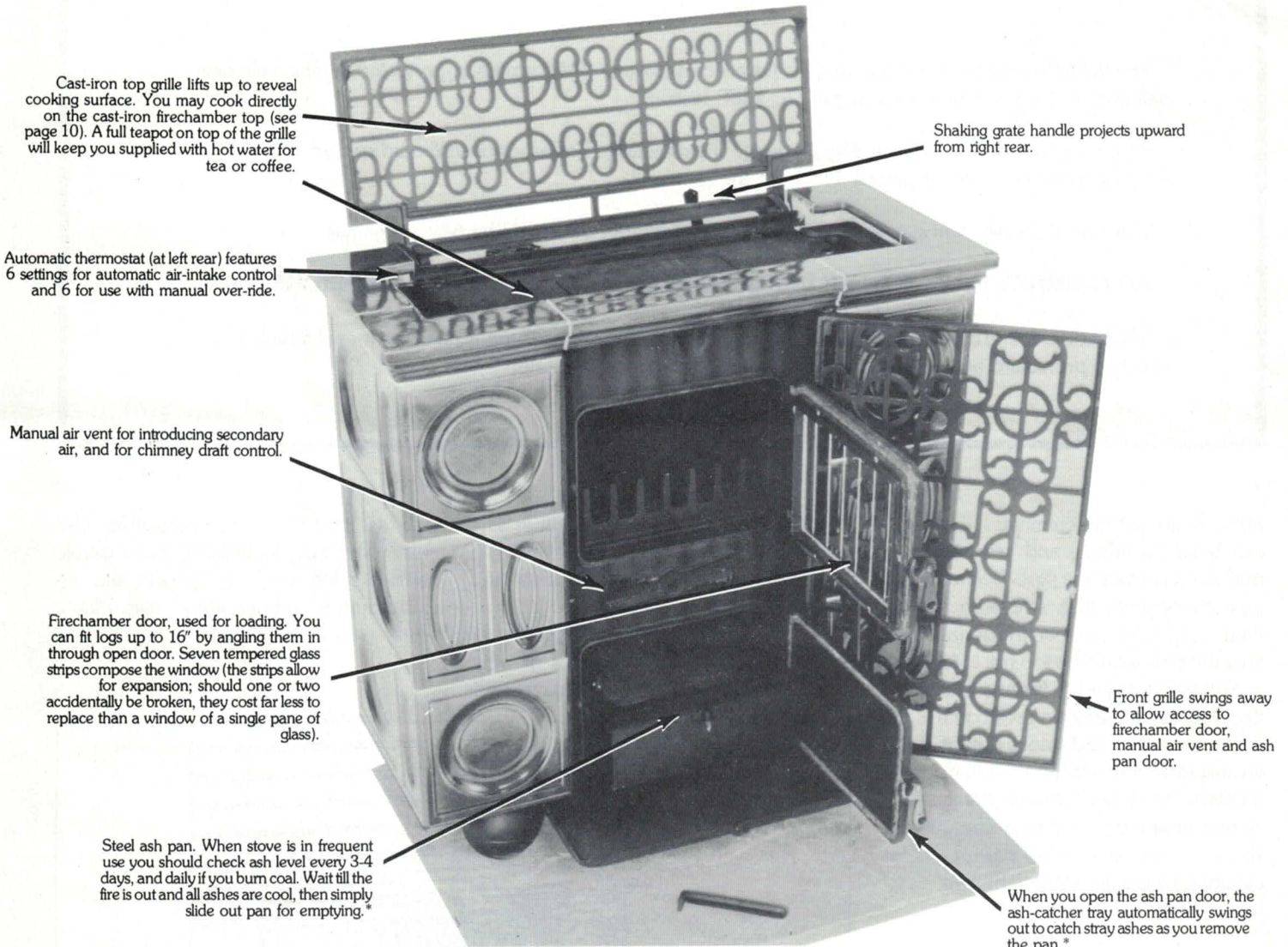
Your floor protection material can be covered with stone, bricks, tiles or other attractive and readily available surfaces as

long as they are non-combustible. Use common sense in keeping combustible items like furniture, newspapers, etc. no closer than 8" to your stove's tiles. Play it safe!

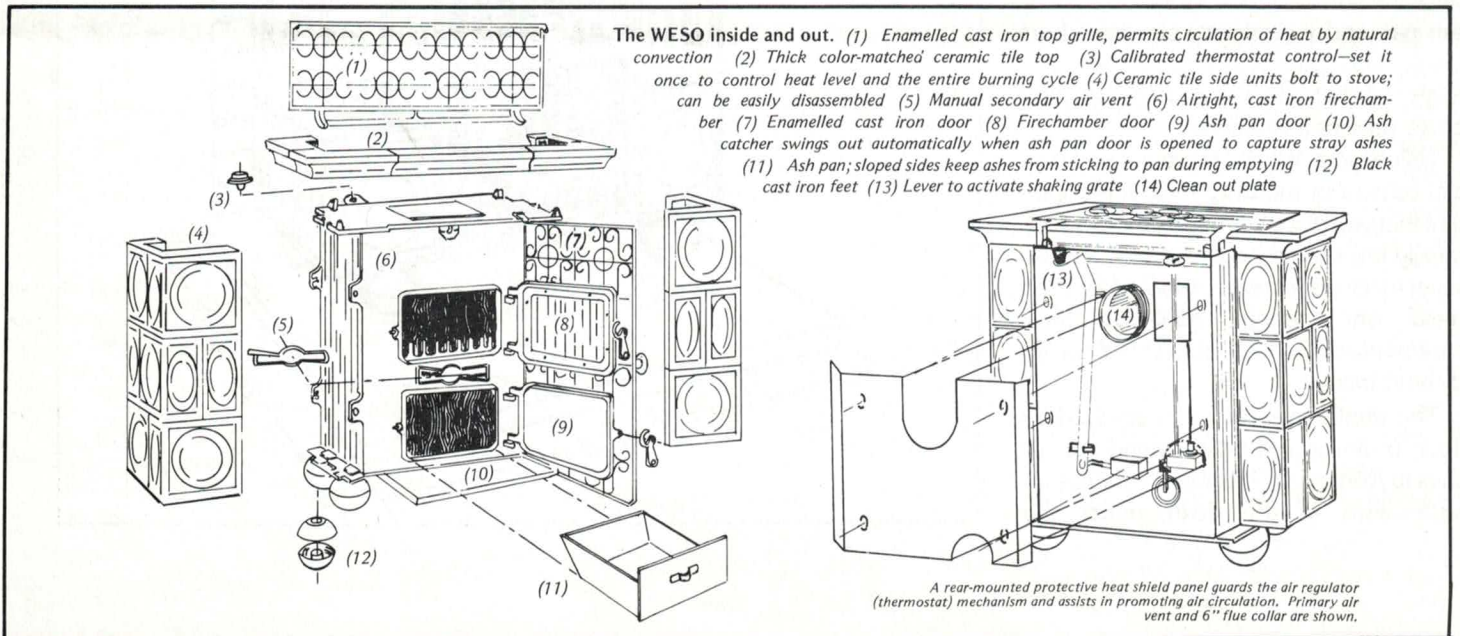


2. Getting to know your WESO Ceramic Tile Stove.

Before operating your stove for the first time, please familiarize yourself with all of its components.



*Note: For your protection, a metal guard makes it impossible to open or close the ash pan door without opening or closing the firechamber door as well. Burning a fire with the ash pan door open would be hazardous because of the extreme draft created. . . Never start a fire with the ash pan door open.



3. How the WESO Ceramic Tile Stove heats your home.

The WESO stove is a sophisticated precision machine, designed to achieve an efficiency level far greater than a simple box stove or fireplace. Your understanding of the principles upon which it functions will help you operate this stove successfully, allowing it to provide you with steady, even heat for long periods with minimal attention from you.

When you burn wood or coal in the WESO's firechamber, combustion actually takes place in two forms.

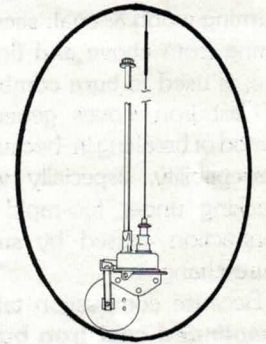
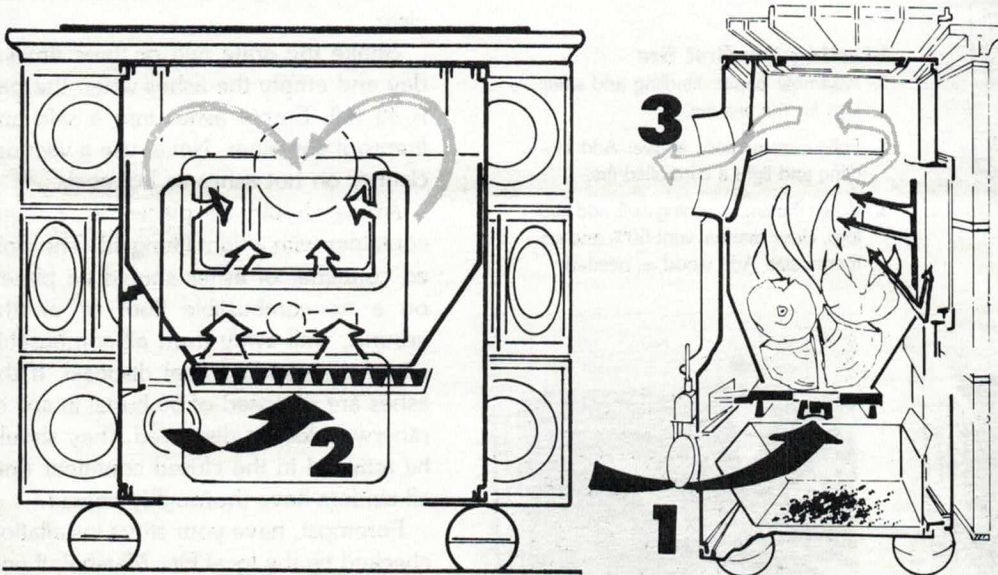
Provided with oxygen and a sufficiently high ignition temperature, the solid fuel matter will burn to ash. Water, inherent in these fuels, must be driven off in the form of steam before this burning process produces significant heat (This is one reason for burning properly seasoned wood).

The burning process also produces

combustible gases, which can account for up to 60% of the total heat source. The flames you see escaping the secondary air ducts are actually some of these volatiles igniting. However in an ordinary open fire, and in the absence of sufficient oxygen heated to a sufficient degree, most of the gases escape unburned. This loss of potential heat is acute in a fireplace, and substantial in many metal stoves.

The WESO is designed to maximize the combustion of volatiles, for maximum heat production. With the firechamber door shut a virtually airtight seal is formed, (except at primary and secondary air controls) which creates a **controlled burning environment**. Into this environment preheated (secondary) air is introduced, for ignition of volatile gases as the solid fuel burns.

The WESO's high-efficiency burning pattern. (1) Thermostatically-controlled primary air enters from a rear port and flows up through the shaking grate to the firechamber. (2) Secondary air enters through manual vent, warms itself by flowing around firedoor frame, then ignites volatile gases. (3) Smoke and spent gases are expelled through flue opening and up your chimney. As a result of this combustion process, air trapped between the firechamber and the tiles is warmed and then rises, forming a natural convection pattern. The tiles absorb and retain heat, dispersing it slowly in the form of radiant warmth. Infra-red heat is also transmitted by the fire through the tempered glass firedoor window.



Automatic thermostat maintains even heat level by regulating primary air intake. Shuts down automatically if stove overheats. Not a crude bimetallic spiral device but a precision regulator based on liquid expansion.

VITAL STATISTICS

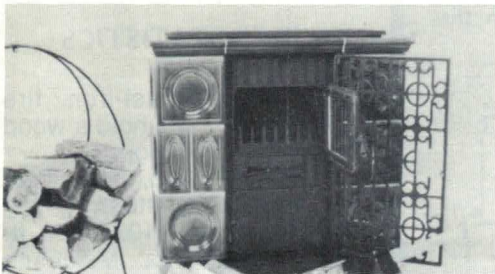
- Airtight, cast-iron fire chamber. Will hold a wood fire up to 10 hours.
- Burns wood, coal, coal logs or briquettes.
- Heats up to 10,000 cu. ft. of living area. Maximum heat output: 30,000 BTU's with wood 40,000 BTU's with coal.
- 6" flue opening, a standard American size. No need for adaptors. Flue height: 24½" from floor to center.
- Stove measures 33½" high x 34½" wide x 19" deep. Top grille opens to 10½" high.
- Log capacity: 16 in.
- Weight: 440 lbs.
- Fire chamber dimensions: 20" W x 18" H x 9" D.

The **level** of combustion is controlled by the thermostat. To use thermostat in its **automatic** mode, use one of the five settings on right half of the dial. The liquid thermostat will automatically regulate air intake to keep heat output at that level. You can over-ride this automatic function by setting the thermostat lever on one of the six settings on the **manual** (right) side of the dial. (The manual setting is also provided as a back-up should the automatic thermostat ever malfunction. It will keep your stove operating efficiently until we send you a replacement.)

Basically, primary air introduced from below the fire is used to create heat in the burning wood & coal; secondary air, entering from above and flowing over the fire, is used to burn combustible gases.

Cast iron stoves generally require a period of breaking in, because of cast iron's susceptibility, especially when new, of cracking under too-rapid expansion or contraction caused by sudden temperature changes.

Because combustion takes place in a **suspended cast iron burning basket** inside the WESO stove, the danger of cracking is virtually non-existent. It is not necessary (and, in any case, impossible) to insulate the bottom of the burning basket with ashes or sand.



4. Building the First Wood Fire

Turn the manual "bow tie" air vent (secondary air inlet) to open position and turn the thermostat control lever to #5. Start a small fire with paper and kindling. When the fire is burning, add two **small** pieces of firewood.

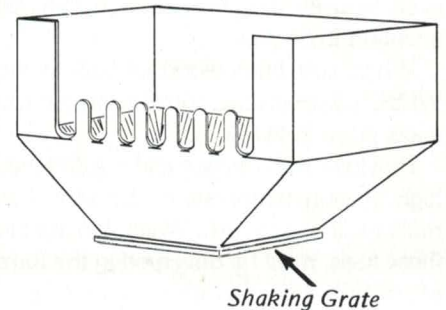
As soon as the logs catch fire close down the manual vent about 50% and set the thermostat at the desired level (but stay away from #1 when burning wood; it's best used for coal fires). For a low wood fire, set at #2 or #3; for a medium fire, set at #4, set at #5 for a hot fire. Use #6 **briefly**, if desired, for burning creosote once a day.

Always keep the firechamber and ash pan door closed when the fire is burning, except when loading wood. You'll notice two small holes drilled near the manual air vent, done so a minimum of air is always allowed to enter the firechamber from a secondary source.

To avoid excessive creosoting, avoid smoldering fires. Conversely, avoid roaring fires, too — they consume wood too quickly and out of control, they can ignite heavy concentrations of creosote that could cause a dangerous chimney fire. Your objective is to operate your WESO stove at a controlled, subdued level that will produce steady heat for many hours.

Don't be alarmed when you see steam

rising from the top of your stove the first time you burn it. The cast iron surface bears a protective coating which will evaporate when the iron grows hot. It's not hazardous but it's smelly — you'll probably want to open a window to eliminate the odor. This situation will not recur after the first burning.



Be certain that your chimney is clean of any accumulated creosote **PRIOR** to your first fire in the WESO stove. Creosote buildup could be ignited and cause a chimney fire.

The window on your WESO stove will get a brown stain when keeping it on a low burn (creosote). When this occurs, burn the stove on a hotter fire until the stain disappears (it will also remove some of the creosote in the chimney). Often all you need is more secondary air. Should the window acquire a greyish film, allow the stove to cool down. Take a wet paper towel and clean the inside of the window with up and down motions until clear.

Shake the grate two or three times a day and empty the ashes when the pan is $\frac{2}{3}$ full. Empty ashes into a safe and fireproof container. Never use a vacuum cleaner on hot ashes or hot coals.

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.

Foremost, have your stove installation checked by the local Fire Marshal, if you fail to do so it may void your fire insurance policy. If you cannot keep a fire overnight, set thermostat on "0" and close secondary air duct.* Even at this

Starting the first fire

1. Assemble paper, kindling and *small* logs for the first fire.
2. Follow instructions above: Add kindling and light a controlled fire.
3. When the fire is burning well, add two logs; close manual vent 50% and set thermostat. Add wood as needed.

*It will give you the maximum burn time.

setting there is air entering the stove for safety and combustion. Experiment at which setting you get the burn-time that you desire! However, never forget to burn stove at high heat at least once a day!!!

What kind of wood should I use?

The WESO's firechamber will accept logs up to 16" long, and preferably not shorter than 12" in order to make best use of the firechamber's space.

You should burn **dry, seasoned hardwood** for three reasons: (1) as noted earlier, water vapor that hinders heat production is more rapidly driven off (2) dry wood produces much less creosote than green wood (3) because of its high density, hardwood delivers far more BTU's (British Thermal Units — a standard measure of heat output) per cord than softwoods.

"Dry" hardwood contains about 20%-25% moisture, and some recommended types, in order of preference, are: apple, black birch, hickory, white oak, ash, beech, red oak, sugar maple, yellow birch, black cherry, elm, grey birch, red maple, white birch. Avoid burning balsam, pine, cedar, hemlock or other conifers.

About Coal Fires

A coal fire will have to be started with a wood fire. Keep your thermostatic setting at the widest opening to create a strong hot fire. Ample amounts of wood should be added until the point that it burns down to such a degree that a piece of wood can be broken down to hot embers. Do so with a poker. However, do not let the embers burn down too much since the adding of coal may crumble them and thereby extinguish the wood fire.

Set your temperature dial on #4 manual. Coal must be used on a manual setting since the temperature of the fire itself varies at a much slower rate than wood and thereby on the automatic setting the damper may react too slowly or too quickly and effect the dying out of the fire.

Keep the bowtie secondary air intake shut. There still will be air entering through the two holes drilled into the bowtie, however, most of the draft will

be through the grate which is important since the higher ash content of coal and also the caky, dense ash of anthracite needs a strong draft through the grate so that it can pass through the ashes also. Moreover, coal itself is denser which also necessitates a stronger draft through the grate.

Now add approximately two inches of coal on top of the hot burning wood embers. Wait until this coal is glowing and has a blue flame. Keep adding coal in the same fashion until the uppermost level reaches the bottom part of the prongs of the front burning basket panel.

A fire should now last at least 18 hours, depending on the draft, Keep your thermostat at #4 manual for approximately 24 hours. If the weather is very cold and it is very windy, set it at a slightly lower setting such as 3 or 2. After the first 24 hours set your manual setting at whatever temperature you are most comfortable with in your own home. The reason #4 should initially be used is that if your chimney draft is insufficient, the fire will not die out.

Sometimes, impure coal may build up ashes and clinkers very quickly. This may have the effect of your coal fire running into the danger of going out. One way to counteract this is to slide a long thin object such as a knife or metal spatula a few times back and forth over the top of the grate. The grate is accessible through the upper edge of the ash pan door. Expecially after a long burn it is more advisable to use this method for moving the ashes into the pan rather than shaking the grate. The reason for this is that the shaking of the grate may break up the remaining coal embers due to the strong movement of the coal. This break-up of the embers may again make the fire go out.

During warm and wind-still days, it is definitely necessary to keep your manual setting at a higher number. As mentioned, a good draft is very important when burning coal and warm weather inhibits the draft.

If your chimney is very short and has a large flue such as in the case in most ranch houses with fireplace installations, it may be necessary to run a six inch pipe

inside the flue all the way to the top of the chimney.

Insulation material must be added around this piping. This narrower diameter pipe will increase the draft. In extreme cases, it may also be necessary to have a cap added on top of the chimney, especially if larger houses or trees are in the vicinity of the home or if the home is built on a hillside.

If you have a metal flue, especially with insulated piping such as metal asbestos stacks, it is of utmost importance that the chimney be cleaned very well immediately after your last coal burn in the spring. Anthracite, and especially bituminous and lignite, leaves a residue of sulfur inside the flue and the combination of this sulfur and humid weather will then turn into acid which will result in rusting and rotting of the pipe. This is not the case with ceramic flue lining. The advantage of coal of course is that there is no creosote build-up, however, it is not mentioned often enough that with metal piping the damage can be much worse.

If you have further questions regarding the burning of coal please do not hesitate to contact us.

Operating your WESO through the burning cycle

Since individual conditions vary, you'll need to do some experimenting to operate your stove at peak efficiency. Except when starting the fire, the stove should be burned in its "airtight" mode; that is, the firedoor and ash pan door shut tight so the only sources of oxygen are through the thermostatically-controlled primary air vent in the stove's rear and the secondary air vent (the front-mounted manual control). In this mode the combustion of volatiles is maximized.

A mid-range setting on the thermostat is preferred. Avoid slow-burning, smouldering fires; they produce excessive creosote.

Your fire should last through the night if you fully load the firechamber with dry hardwood before retiring. A properly-maintained **coal** fire can last **up to 18 hours** without refueling. When burning a fire overnight, set your thermostat at a low setting. Please make sure to burn a fire at a high setting (six) for 20 minutes

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in the morning to burn off the creosote, which accumulated overnight.

Using the Shaking Grate

You will increase the efficiency of the WESO by getting in the habit of operating the shaking grate every few hours while the stove is burning a wood or coal fire. Simply grasp the knob on the grate's lever with the Kalte Hand* and vigorously move it back and forth several times. This action loosens accumulations of ashes and sends them down to the ash pan below, allowing a freer circulation of air around the burning coals.

The WESO's exterior will warm up more slowly than a sheetmetal stove and somewhat more slowly than a cast-iron heater, since it takes longer for ceramic tile to absorb heat than metal. However, these tiles serve magnificently as a **heat sink** — better than any other material available today. They will continue radiating heat after the fire has died out. You can touch the tiles without raising "instant blisters," even when the stove has been burning for hours.

*For operating the firechamber door, ash pan door and shaking grate, we have provided a metal **Kalte Hand**, literally a "cold hand." Keep it near (but not on top of) your WESO and you'll be able to operate your stove comfortably at all times.

Why the firedoor glass may turn brown

Note: If the glass in the firechamber door develops a brown or black creosote coating on its interior, it's a sign that you are not introducing enough secondary air through the manual air vent. The coating is produced by unburned volatiles. Don't be afraid to open up the "bow tie" vent, for the fire intensity will still be controlled by the thermostat regulating primary air intake.

Smouldering fires will also turn the glass brown or black. A strong fire will burn this off in a short time. If creosote has been allowed to build up on the window over several days you may have to use oven cleaner or stove glass cleaner (available at stove stores and hardware stores).

When starting a fire in your cold stove, the window may get brownish inside because secondary air has not had a chance to become pre-heated to a level required to ignite volatiles. However once the fire gets underway, the brownish coating will burn off.

After one or two weeks of constant operation a fine level of ash will probably coat the window, making it appear milky or opaque. Don't attempt to rub it clear. Instead, let the stove cool down. Wet a tissue or cloth and squeeze out the excess water. Use it to wipe the inside of the glass clean in vertical motions.

The firedoor window consists of individual strips of Pyrex glass, which are touching yet free to expand individually. They will allow a tiny bit of secondary air to reach the fire — a negligible amount compared to that entering through the manual vent.



A great fertilizer!

Never leave the ash pan door open as a means of supplying air to the fire — always keep it closed except when emptying the ash pan.

Tip: Wood ashes are a fantastic fertilizer! Spread them thin around your vegetable or flower beds, especially in the spring. They'll keep away snails, caterpillars and those little black sucking bugs that always seem to attack your radishes and weak tomato plants.

Sprinkle ashes over your lawn, too. Mix them into your compost pile. Wood ashes are loaded with valuable minerals and potash — wonderfully nutritious for growing green things. **However, beware of coal ashes!** Your plants won't like them, even in small amounts.

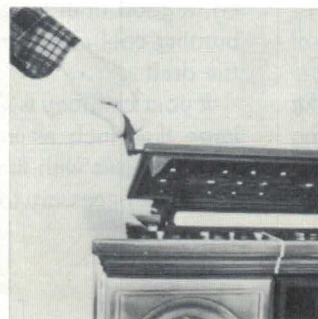
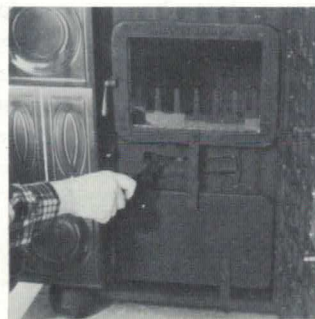
One more cautionary note: common sense will tell you **never to put hot ashes into any kind of plastic or wood container** — especially plastic, which, aside from being a fire hazard, can produce toxic fumes. Use a metal container.

A word about creosote

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.

The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

As a means of controlling accumulation, you may want to "open up" the thermostat to #6 (#4 on manual side) for 20 min-



utes or so when starting your fire in the morning to let it burn at full capacity. The high heat will tend to burn away creosote — but you should **never** do this if a thick layer of the stuff has been allowed to build up.

Certain powders and chemicals exist that offer to control creosoting, but we cannot vouch for their effectiveness. The **best** and **safest** way to control creosote is

to make sure your chimney is cleaned regularly. Do it yourself, or hire a professional chimney sweep. It's well worth the time or modest expense.

What to do if you have a chimney fire

You can effectively prevent chimney fires by following the preceding guidelines — by keeping your chimney clean, burning seasoned instead of green

wood, and avoiding smouldering fires.

But what if the seemingly impossible **does** happen? First of all, shut down the stove tightly, both primary and secondary air. This will prevent fire-feeding oxygen from entering the chimney. **Call the fire department.** Have someone patrol outdoors to extinguish sparks from the chimney. **Never** pour water into or on your stove.



5. Cooking on the WESO Ceramic Tile Stove

While the WESO is designed primarily for heating it does offer a stovetop cooking capability; very convenient during a power outage, and good fun at other times.

By raising the cast-iron top grille you can place cookpots directly on top of the

firechamber. Some trial-and-error experimenting is needed before you develop the skill of woodstove cookery, but once you get the knack of it you'll have no trouble. Keep the fire burning medium-high and steadily. Test the cast iron surface for "hot spots."

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6. Further Information

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-8-1974. The address of the NFPA is 470 Atlantic Avenue, Boston, MA 02210.

WARNING: The installation of this stove must comply with state and local

requirements and be inspected by the state of local building inspector if required.

NOTE: This stove is **NOT** approved or recommended for use in mobile homes.

Care should be taken on models with the enamelled brown grills that these enamelled portions are absolutely clear

of any dust particles or foreign objects. Once the stove is hot, if these particles are not removed they may become cooked into the enamelled surface and will be impossible to remove. Also, place any pots or pans very gently on the grill so that the enamel will not chip off.

WARNING!!

Caution against the storage or use of flammable liquids as follows:

"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."

DO's and DON'Ts

DO be sure that there is at least an 18 inch clearance between horizontal piping, if used, and combustible ceiling.

DO install your stove 24 inches from an unprotected combustible wall.

DO install your stove at least 11 inches from a combustible wall protected by 1/4 inch asbestos cement board spaced 1 inch from the wall.

DO install your stove at least 11 inches from a combustible wall protected by 28 gauge sheet metal spaced 1 inch from the wall.

DO protect your flooring with a non-combustible material extending 16 inches in front of the door of the stove and 8 inches on both sides of the door under the heating unit and 2 inches to either side of the chimney connector and under it, protecting the total area beneath and aside the stove.

DO be sure that the chimney connection pipe extends at least 2 inches into the chimney, but does not extend so far into the chimney flue that it blocks air flow.

DO strive to use the shortest pipe length possible and fewest elbows possible in your installation to minimize the creosote and ash buildup.

DO use heavy gauge stovepipe, at least 18 gauge. Lighter gauge stovepipe is more susceptible to rusting and corrosion from smoke condensates.

DO have the joint of each stovepipe secured with three (3) sheet metal screws to avoid possible separation during use.

DO install smokepipe segments with the crimped end down when possible. This permits the creosote to drip back into the stove and be burned away. Horizontal pipe should have the seam up.

DON'T use more than one elbow in the stovepipe when installing your Weso Stove (unless absolutely necessary).

DON'T operate the stove while either the ash door or fire door are open.

DON'T operate the stove to such an extent that any portion becomes "red hot".

DON'T use chimneys other than Class A masonry chimneys or all-fuel factory-built chimneys which are approved by Underwriters Laboratories (UL). Metalvent and Metalbestos are two such approved chimneys.

DON'T use Cannel coal or Coke in the Weso Stove.



7. Maintenance for Years of Trouble-Free Service

Like other major pieces of furniture and appliances in your home, your WESO will need periodic care for it to continue looking beautiful and functioning at peak performance.

Cleaning the tiles is simple; use a moist cloth (no abrasives, steel wool, etc. which would scratch these surfaces). You should empty the ash pan when it's about two-thirds full, and **always** when the fire is out.

At the end of the woodheating season, we recommend you follow these six maintenance steps:

1. Remove the tile sections and thoroughly clean them of dust inside and out.
2. Check out the chimney for leaks. Clean the chimney, the stovepipe connection and the interior of the cast-iron core of the WESO itself.
3. Blacken all outside cast-iron surfaces with stove polish (easily available at local hardware stores), to prevent rusting. The decorative cast-iron front and top grilles need not be treated since they are coated with a protective enamel.
4. If you find that replacement parts are needed, now's the time to order them.

NOTE: All parts for the WESO Ceramic Tile Stove are available from Ceramic Radiant Heat. Current prices of parts are available on request.

A final word.

If you still have questions we haven't answered, won't you please contact us by phone: (603) 524-9663—or by writing us a note. We'd welcome any comments and opinions about your stove you'd like to share with us, too. Send us a photo of the WESO in your home!

We would also welcome hearing about friends of yours who are or might be seriously interested in owning a WESO stove. Just jot down their names and addresses and send them along to us in the enclosed envelope — we'll mail them full particulars without obligation. Thank you!



Acknowledgement

Some of the material and sketches in the Manual are derived from publications of the New England Regional Commission, the result of research funded by the U.S. Department of Commerce. We are grateful for the use of this material.

Recommended Reading

If you want to learn more about the technology, efficiencies and environmental soundness of heating with wood, we recommend the following books:

Wood Energy by Mary Twitchell. Pub. 1978 — a practical guide to heating with wood. \$7.95 paperback. Available from Garden Way Publishing, Charlotte, Vermont 05445.

Heating With Wood by Larry Gay. Probably the most popular book on the subject, now a classic. \$3.95 paperback, also from Garden Way Publishing.

The Woodburners Encyclopedia by Jay Shelton and Andrew Shapiro. An information source of theory, practice and equipment. \$6.95 paperback, pub. by Vermont Crossroads Press, Waitsfield, Vt. 05673.

Tel: (603) 524-9663



Division of Texknit Service & Supply Corp.

Lochmere, New Hampshire 03252 U.S.A.

Dear Customer:

Enclosed is a copy of the Bill of Lading covering shipment of your stove.

We want to help make delivery as easy and trouble-free as possible for you, and to assist you in the unlikely event you should have a claim for damages. Please review the points made below, and retain this letter until you have received and fully inspected your stove.

HOW TO ARRANGE DELIVERY

As you know, your stove is being shipped motor freight collect. By law, the carrier is required to call you and arrange a mutually convenient delivery time for you. The carrier is also required to make delivery to your home. You should not be charged extra for this service. If such charges appear on the carrier's invoice we suggest you pay them and file an over-charge claim with the carrier.

You should have payment for the shipping charge ready at the time of delivery. Most carriers will accept a personal check but if you intend to pay by check, it would be wise to verify acceptability when your trucker calls.

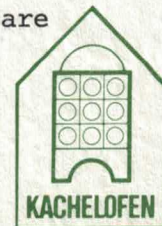
Also, according to ICC regulations. "Freight will be unloaded at the delivery site immediately adjacent to the delivery vehicle." This is to say, the trucker is NOT required to help you move or transport your stove into your house.

Furthermore, regarding a shipment in your stove's weight category, the carrier will unload the item if there is a dock, platform, or ramp adjacent to the vehicle. If not, the driver, on request, will assist you in unloading. He is required to do so.

Your stove will arrive in two containers: a carton holding the three tile sections and weighing 100 lbs., and the cast-iron burning chamber which is palletted and strapped and weighs 355 lbs.*

It takes two husky people to off-load the burning chamber and the carton of tiles. Consequently, you should have the appropriate muscle-power available--at least one person (you or someone you designate) to help the trucker unload your stove, and two people to carry it to your house. If you have a wheeled dolly to help, so much the better.

Should it be difficult to get help, you may want to ask the carrier if they will provide an extra man, or a vehicle with a hydraulic tailgate. These "extras" are



expensive, however, so you'll want to get estimates before deciding.

WHAT IF YOU FIND YOUR STOVE HAS BEEN DAMAGED?

As you will see, extraordinary precautions have been taken in packaging and crating your stove for safe shipment, but on rare occasions damage to our product does take place in transit. Here's what to do if by some chance your stove does sustain damage:

If damage is immediately apparent and you recognize it while the carrier is present, do not refuse shipment. Sign the carriers release form and state on it that the shipment was received damaged. If the packing material itself has any damage, also mention it on the release form. Damaged packing may conceal damaged stove parts.

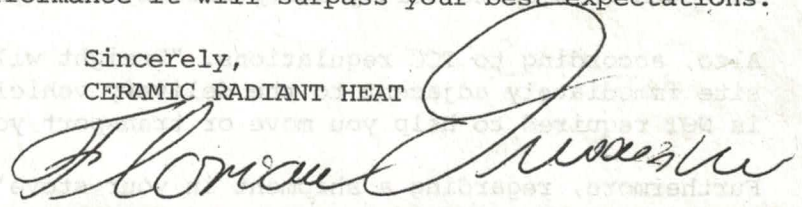
If the packing seems in good condition and the carrier has left, send a registered letter to the carrier explaining the damage in detail. Include a copy of the release form. Send us a copy of this letter plus a copy of the release form!!! Also send us pictures of the damage, so we may send you the necessary replacements! Follow the same procedure for unconcealed damage!!

Then call us at (603) 524-9663 and we will advise you regarding the fastest and easiest way to secure replacement of any damaged component.

We will handle the insurance claim. However, we can only proceed if we and the have your letter explaining in detail the damage with a copy of the release form attached to it!!!

. . . Once again, thank you for your order. Your stove will arrive soon, and I'm confident that in appearance and performance it will surpass your best expectations.

Sincerely,
CERAMIC RADIANT HEAT



Florian Duvoisin

NOTE: * In the case of the Weso Coalburning Stove - it will come in one crate weighing approximately 300 lbs.

In the case of the Warmrite Coalburning Stove - it will come in one crate weighing approximately 250 lbs.



Tel: (603) 524-9663



Lochmere, New Hampshire 03252 U.S.A.

Division of Texknit Service & Supply Corp.

Dear Friend:

The WESO stove is on its way to you!!!

Also enclosed with this assembly instruction letter you will find our Operations Manual.

The stove will arrive partially disassembled. The reason for this is that we used to have breakage on some of the stoves we delivered. We think it is well worth taking about two hours to assemble the stove instead of receiving an assembled broken stove. Do not fear, it is quite simple to put together.

Here we go:

- A. Remove cast iron stove packing.
- B. Open the glass door and remove the enclosures: 4 feet; and thermostat rod.
- C. Open ash pan door: In it you will find: thermostat; cold hand; 4 large bolts with split washers; 1 knob and 1 asbestos washer; 8 smaller bolts, and 1 nut; 1 black knob and medium size bolt with split washer; 2 pins; 1 wrench; and 2 metal runners.

GENTLY lay the stove on one of its sides (need two strong people).

- 1. Take the two runners and four small bolts. The runner with the L-shape should be affixed with two bolts on the left side of the bottom (looking from the front). Affix the other runner on the right side with the remaining two bolts.
- 2. Take the four large bolts with the split washers and the four feet and affix them to the bottom of the stove in the appropriate holes.

GENTLY raise the stove to its upright position. Remove ashpan from grille door and slide it in the runners which you have installed.

Now use the metal strip which held the front grille door closed and affix it to the outside of ash door with L-shape pointing downward and inward. The L-shape part of this strip has to extend into ash tray so that when ash door is opened, the tray is pulled out. One of the screws is located in the upper screw-hole on the inside of the ash door.

THERMOSTAT

Remove the heatshield from the back of the stove.



Affix the thermostat with three bolts in the appropriate holes on V-shape at lower right.

On upper rear you will see a metal plate. Attached on the inner side, on the right and center, is a small metal clip which is bent on one end. Loosen its nut and bolt so that this small metal clip moves freely. Keep bend to the right when facing rear of stove. Pull thermostat pin (coil will unwind somewhat) and slide it between clip and large plate where small space is created by bend in the clip. Pull pin until its tip is level with the upper side of the large metal plate. Tighten nut and bolt of the clip.

Now slide thermostat setting rod through center of its dial (top of stove). Remove cotter pin on its end. Please make sure that the small L-shape on top of the thermostat setting rod points to "0" on the automatic side. Fit rod into silver colored receptacle on thermostat and reattach cotter pin through appropriate hole.

On "0" thermostat setting, the damper should be absolutely flush with the stove opening, i.e., airtight. If it is not, please adjust nuts behind the damper until damper tightly covers hole (do not tighten too much, damper has spring which then moves inward).

Your thermostat is now correctly installed and you can now replace the heatshield.

KNOBS

Screw wooden knob into front grille door. Please make sure the asbestos washer is placed in between. Take black knob and place it on top of shaker (in back of stove on right). Take medium size bolt with split washer and screw into knob through the hole provided on the shaker.

TOP GRILLE

Now affix top grille with the two pins. Place a washer between both hinges so that grille only has little lateral movement (these washers can be found on the upper bolt of the side tile sections).

TILES

Now open cardboard box. Take all items out with the greatest of care!!!

Please make sure that the two side tile sections are standing with their two prongs downward. Unscrew the top and bottom nuts on both tile sections all the way and also unscrew the bolt itself, but don't remove them! Only one washer should be placed on all bolts. Now lift the sections and slide the bolts into their appropriate slots on top and bottom of stove. The bottom steel prongs on the tile sections must fit snugly in their corresponding holder on the bottom of the stove. The side tile sections should at their upper end be no higher or just slightly higher than the top of the stove. Now fasten nuts with the enclosed wrench.

Remove four screws on top of stove. They are placed close to the four corners. Take top tile section and place holes on its angle iron flush on the four raised holes (the empty space in the top tile section faces toward the rear). Take the four screws and affix them into the appropriate holes.

Now lower top grille slowly!!! Make sure that it does not touch any part of any tile!! If it does, please find out why. Perhaps one of the side tile sections

