

Price \$2.50
#71483

Owners Manual

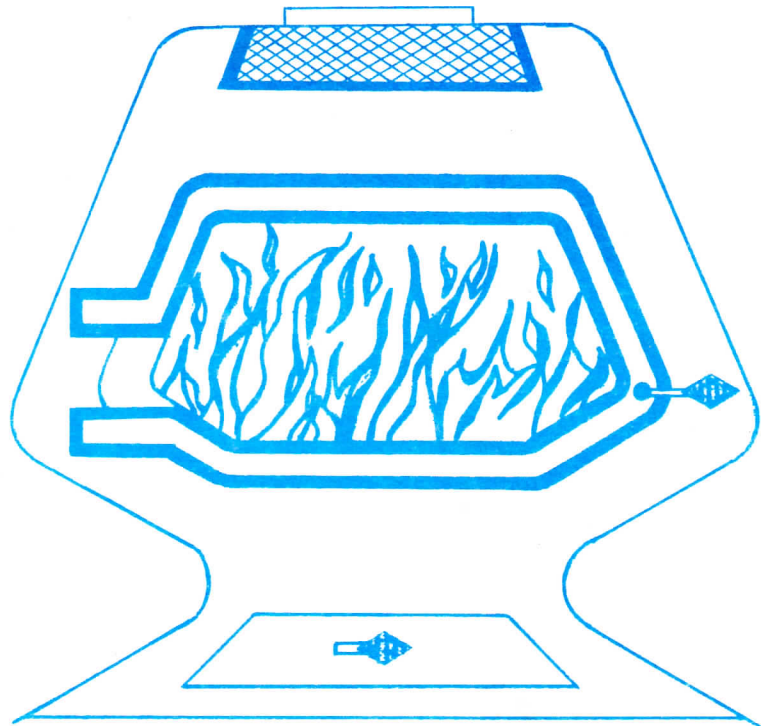
TESTED BY:

Warnock Hersey
International
TO:
Underwriters Laboratory
Safety Standard 1482,
I.C.B.O. and H.U.D.
Requirements

CAUTION:

Read all
instructions
carefully before
starting
installation.
Save this
manual for
future
reference.

V.F.C. AURORA - ORION FREE STANDING HEAT CIRCULATING STOVES



- Installation
- Operation
- Maintenance
- Wiring
- Repair Parts

CAUTION

This unit must be installed separately in a masonry tile lined chimney or solid fuel approved chimney.

rules for safe installation and operation

1. **READ** these rules and the instructions carefully. Failure to follow them could cause a malfunction of the heater. This could result in death, serious bodily injury, and/or property damage.
2. **CHECK YOUR LOCAL CODES.** The installation must comply with their rulings. Adhere to installation clearances and restrictions.
3. **ALWAYS CONNECT** this heater to a chimney and vent to the outside. Never vent to another room or inside a building. Do not vent into a chimney that has another appliance attached to it.
4. **DO NOT** connect a wood burning heater to an aluminum Type B gas vent. This is not safe and is prohibited by the National Fire Protection Association Code. This unit must be installed in a masonry tile lined chimney or a solid fuel approved chimney.
5. **MAKE SURE** the chimney is high enough to give a good draft. Keep the chimney and pipe clean inside to avoid blockage. Otherwise smoking will result.
6. **PROVIDE AIR** for combustion from the outside into the room where the heater is located. If the intake is not in the same room, the air must have free access to the room.
7. **KEEP THE ASH PAN** section free of excess ashes. Failure to do so will cause grate warpage and burn out.
8. **CAST IRON PARTS MUST BE "SEASONED" TO AVOID CRACKING. BUILD ONLY SMALL FIRES DURING YOUR EARLY USE.** Never build extremely large fires in your heater.
9. **TO PREVENT INJURY** do not allow anyone who is unfamiliar with the operation to use the heater.
10. **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.
11. **FLUE CLEANERS** that have a sulfur base must never be used. They are harmful to the metal in the heater and metal chimneys. The warranty on this heater is void if these products are used. Solid fuel burning appliances require that heat exchangers and flue pipes be cleaned more frequently because the soot (creosote) and ash accumulation are more rapid with solid fuel burning.
12. This heater may be installed in a mobile home or trailer. Do not install unit in a sleeping room. "THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING/ROOF MUST BE MAINTAINED."
13. **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 Ave., Boston, MA 02210.

WARNING

Burn wood only; unsafe to fire with coal.

CAUTION: Do not touch the heater until it has cooled.

tools and materials needed

TOOLS

- Pencil
- Drill, Hand or Electric
- Flat Head Screw Driver
- 6 Foot Folding Rule or Tape
- Drill Bit (For Sheet Metal Screws)
- 5/16" Wrench or Socket
- Tin Snips
- Gloves
- 7/16" Wrench or Socket

MATERIALS

- 3/8" Asbestos Millboard for Combustible Floor Protection. (43-1/2" Wide by 40" Deep Min. Size Required for the Aurora; 42-1/2" Wide by 37" Deep Min. Size Required for the Orion)
- 6" Diameter 28 Gauge Galvanized Pipe for Exterior Air Intake.
- Screen for Exterior Air Intake Pipe.
- Insulation for Exterior Air Intake Pipe.
- 6" or 8" Diameter 24 Gauge Minimum Black Pipe Required.
- #10 by 1/2" Sheet Metal Screws. (3 Screws per Section of Pipe)
- For Chimney Requirements See Page 5.

IMPORTANT

Always comply with state and local codes when installing this heater.

assembly

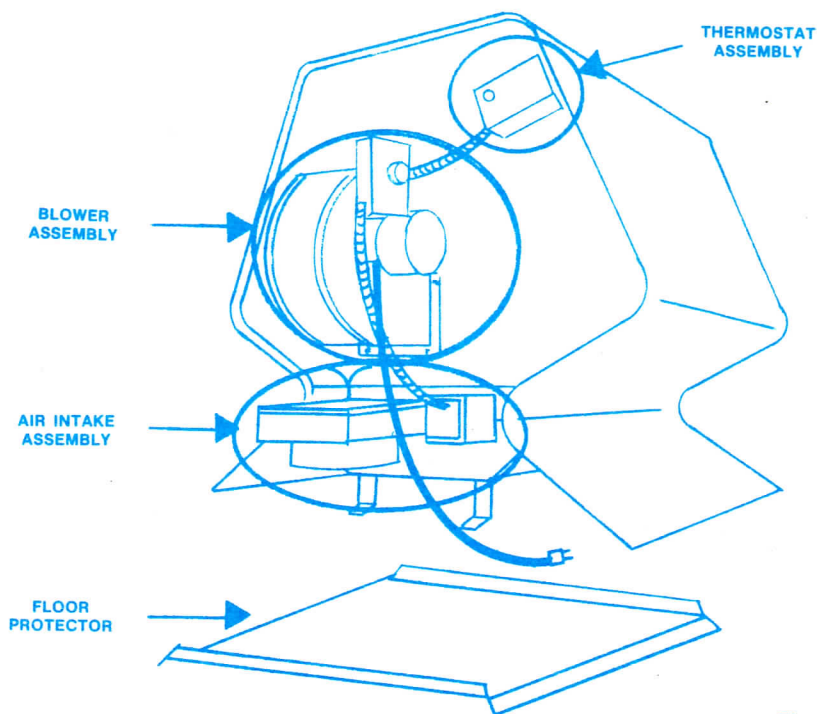


Figure 1

- Remove the package containing the wiring harness from the inside of the unit. Then remove the harness from the package.
- Fasten AIR INTAKE ASSEMBLY to rectangular opening on the lower center portion of unit. (See figure 1.) With the butterfly spindraft control facing up and the 6" round flange for the exterior air intake facing down, use the four #10 by 1/2" sheet metal screws to secure the air intake enclosure to the stove. Use a 5/16" wrench or socket to tighten screws. The Air Intake Assembly must be flush with the stove in order to assure air tight construction and unwanted air from entering the unit.
- Insert the tinnerman clips through the blower hole opening into the 5/16" holes next to blower opening-corners on the stove. The bent edge of tinnerman clip must fit to the inside of the opening. Make sure clip openings are aligned with 5/16" holes in the stove. Fasten thermostat stand off bracket to upper right corner of the stove using two #10 by 1/2" sheet metal screw. Make sure the 3/4" holes are aligned.
- Insert the 5" thermostat probe through the stand off bracket into the unit. (See figure 1.) Do not tighten stand off bracket onto the thermostat probe at this time. Align the blower holes and fasten the BLOWER ASSEMBLY onto the unit using four 1/4" by 1" hex head bolts. (See figure 1.) Tighten firmly, but do not overtighten. Overtightening will bend the tinnerman clips.
- Press the thermostat assembly flush with the stand off bracket. Align the thermostat so that the short end of the thermostat is parallel with the side of the stove. (See figure 1.) Tighten the set screw on the stand off bracket onto the thermostat probe. Do not overtighten. Overtightening may result in damage to the thermostat.

IMPORTANT

The galvanized floor protector must be in place beneath the stove before the stove is placed into position.

IMPORTANT

In a mobile home installation the unit must be fastened to the floor using the two brackets at the rear of the stove.

installing your wood burning heater

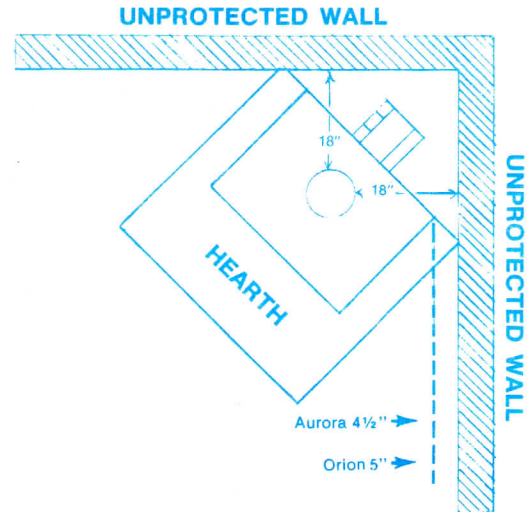
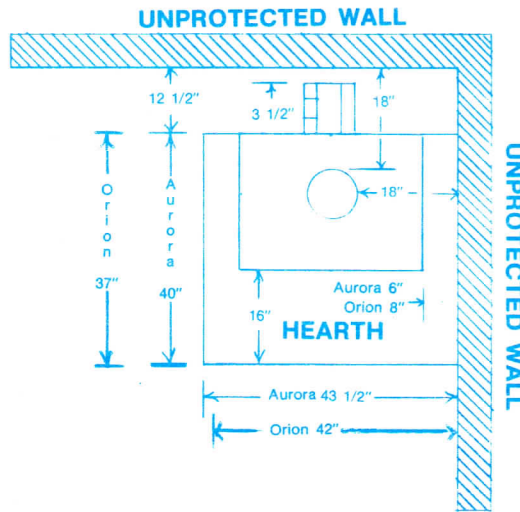
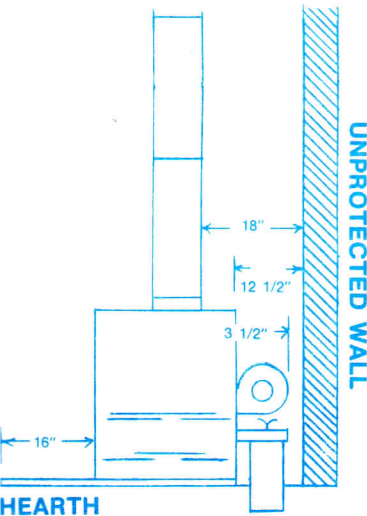
SAFETY NOTICE

If this unit is not properly installed, a house fire may result. For your safety, follow the installation manual. It is very important that you observe the minimum clearances shown below.

IMPORTANT

Single wall stove pipe must maintain an 18" clearance to a combustible surface (wall or ceiling). When this clearance is maintained the unit may be placed directly beneath the pipe and turned parallel to a wall or perpendicular to a corner and it will maintain its clearances.

MINIMUM CLEARANCES



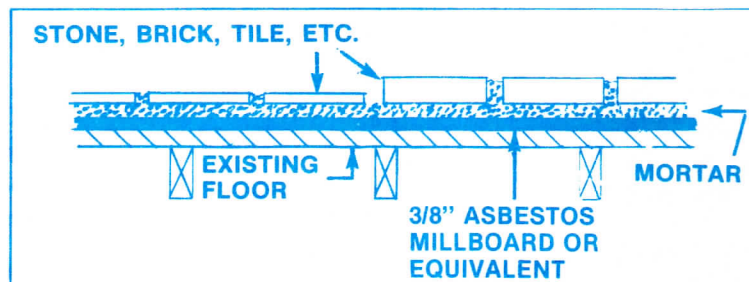
MINIMUM HEARTH PROTECTION

The minimum hearth protection can be attained using 3/8" asbestos millboard.

No stove should be installed on a combustible surface because of the possibilities of falling hot ashes. The stove must set on a non-combustible pad of 3/8 inch or more in thickness. We recommend asbestos mill board, or a U.L. listed equivalent, however the appearance may be enhanced

by adding other non-combustible materials such as stone, brick or tile. The covering must extend 16 inches in front of the stove and a minimum of six or eight inches to either side of the stove.

LISTED FLOOR PROTECTION SYSTEM

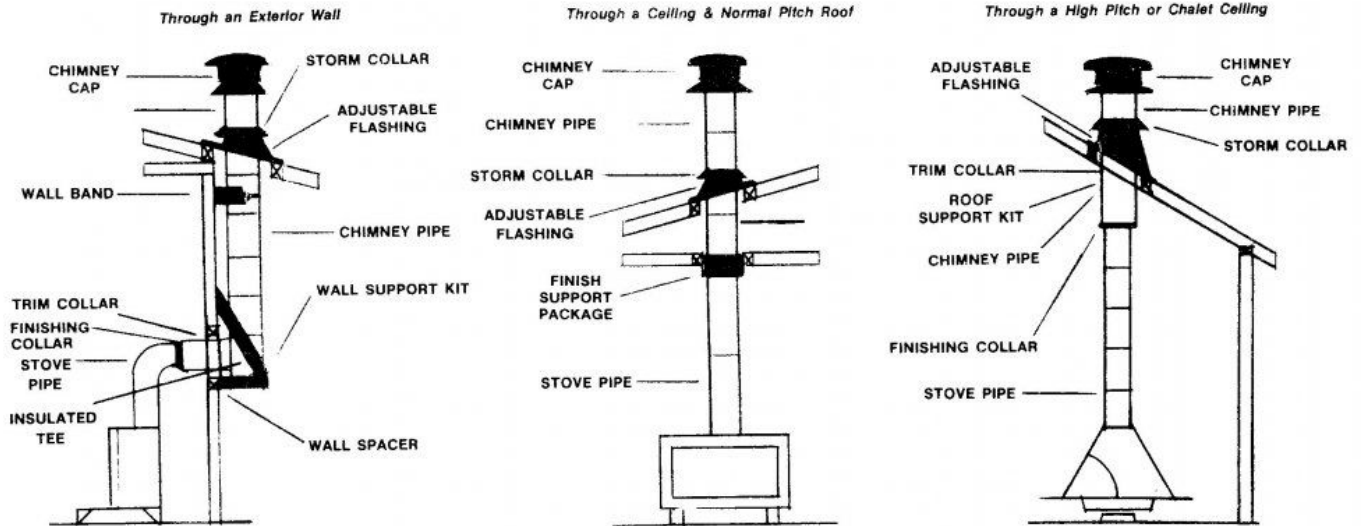


installing your wood burning heater (continued)

HAVE YOU SELECTED THE CORRECT PARTS

The chimney for your fireplace or stove will probably take one of the following configurations. Each of these chimney systems requires a different combination of parts to complete a satisfactory chimney assembly.

These fittings are illustrated and labeled for your convenience. It is important that you have the correct combination of parts and sufficient chimney pipe *before* you start installation.



A correctly installed insulated chimney system that is properly used and systematically maintained is one of the best investments a home owner can make if he intends to burn wood as a fuel. Installation of a chimney has three important parts:

1. Proper Support
2. Clearance to combustible material as it passes through the building
3. Correct termination

Each of these steps must be carefully accomplished in order to produce a safe and satisfactory result.

IMPORTANT

In a mobile home installation a U.L. Listed interior chimney must be used.

IMPORTANT

Always follow chimney manufacturer's installation instructions. Check with code and fire officials for installation through combustible walls or ceilings.

IMPORTANT

Always comply with state and local codes when installing this heater.

WARNING

Never connect a wood burning heater to an aluminum Type B gas vent. This is not safe and is prohibited by the National Fire Protection Association. If connecting to a prefabricated chimney be sure it is a solid fuel type. The liner must be at least 6" inside diameter for the Orion and 8" inside diameter for the Aurora.

When connecting the flue pipe from the heater to the chimney, start with a straight pipe or elbow WITH THE CRIMPED END TOWARD THE HEATER. The crimped end should fit inside the flue opening on the heater. Stove pipe should be a minimum of 24 gauge thickness. Do not use galvanized or aluminum stove pipe. If local code permits flue installation into existing tile lined masonry chimney, a thimble should be used at chimney. Pipe should terminate flush with inner face or chimney-

liner and should be properly sealed at this point. The fewer elbows used the better. Any horizontal flue pipe must slope upward 1/2" to the foot. Make sure all connections are air tight. Secure all joints with 3 sheet metal screws. (Not supplied.) You may want to install a cast iron damper at this time. Install it in the first vertical section. This damper will help you to slow the burning rate. This helps you to get more heat from the wood you are burning.

care and operation

WHAT KIND OF WOOD TO USE?

Burn dry and well seasoned hardwood. Season wood at least six months, preferably a year to eighteen months. Woodburners who ignore this advice are likely to have dirty chimneys and poor performance from their heaters.

There are about 8600 BTU's of heat available from each pound of wood. It takes about 1000 BTU's to evaporate each pound of moisture from a log. The wetter the wood, the more energy it takes to get the moisture out of your firewood and less energy is available to heat your home. Seasoned wood produces more useable heat, 20-25% more in the case of some hardwoods. Seasoned wood will produce less creosote. Creosote is covered on page 8.

The moral is: Don't burn green wood. If you buy green wood, season it before using. With experience you can spot green wood easily. It is heavier; it looks different. Seasoned wood will show cracks radiating outward from the heartwood toward the bark, like wheel spokes. Green wood will not show this pattern of cracks.

Use the longest piece that will fit the fire box. The wood will tend to burn (especially with the draft turned low) from front to back in the fire box. The longer the stick, the longer the fire will hold.

You get roughly the same amount of heat from a pound of wood no matter what the species of tree it comes from. But wood is not sold by the pound, it is sold by volume - by the cord. Therefore, the dense heavy woods are the ones to buy, the ones that give you more pounds per cord.

The following figures, compiled by the United States Forest Products Laboratory, show the amount of heat available per cord of wood from a few representative tree species:

AVAILABLE HEAT PER CORD IN MILLIONS OF BTU*

	Green Wood	Air-Dry	% More Heat for Air-Dry Wood
Ash	16.5	20.0	21
Aspen (popple poplar)	10.3	12.5	25
Beech, American	17.3	21.8	26
Birch, yellow	17.3	21.3	23
Douglas Fir, heartwood	13.0	18.0	38
Elm, American	14.3	17.2	20
Hickory, shagbark	20.7	24.8	19
Maple, red	15.0	18.8	24
Maple, sugar	18.4	21.3	16
Oak, red	17.9	21.3	19
Oak, white	19.2	22.7	18

*BTU - British Thermal Unit

Other good, to moderately good, firewoods are apple, walnut, pecan, dogwood, cypress, sycamore and gum. The latter two are hard to split, as is elm.

A cord of wood measures four by four by eight feet. A cord of four foot logs thus stacked occupies 128 cubic feet and contains about eighty cubic feet of solid wood, the rest being air space between logs.

If you buy a cord of wood, cut it to length and split it, you will find it does not occupy 128 cubic feet when stacked. You have not been cheated. A cord cut to length and split packs more tightly and occupies less space.

If you want your wood to dry as quickly as possible, cut it to length and split it. Stack it where the air can move through the pile and shelter it from the weather. A wood shed with air vents in the side walls, like a tobacco drying barn, is effective.

If you cut your trees in the spring or summer, let them lie awhile, until the leaves wither. They will draw moisture from the wood, drying it more quickly than if you limbed the tree immediately.

A good time to cut your own wood is in the late winter or early spring, as soon as the woods are free from snow. Then hold the wood for use in eighteen months. This is often the best time to buy wood, too. Green wood can sometimes be had at lower prices in spring or early summer.

CAUTION

DO NOT USE COAL IN THIS HEATER

GET TO KNOW YOUR WOOD BURNING HEATER

Take the time to learn how different settings of the damper will affect burning. You will find that if you keep the air damper open one to two turns your heater operates at maximum efficiency. This can vary with the moisture in the wood. We cannot state just how much heat you will receive from your heater due to variations of chimneys and type of wood you are using. These all affect the way your heater burns.

Your wood should be placed into the unit from front to back. This allows the wood to roll toward the grate and receive its primary combustion air through the grate and ashes to fall through the grate in the ashpan. The secondary combustion air enters through the slots behind the door. This air sweeps the glass door clean and creates secondary combustion at the top of the unit.

Your manual spin draft control is located in the back of the unit beneath the blower, on top of the air intake assembly (see figure 1, page 3.) One to two turns open will give you an extended overnight efficient burn. Three to four turns open will allow more flame in the unit and a hotter burn.

DANGER

Do not operate stove with fuel door or ashpan open. This will cause fire to burn out of control and cause damage to electrical components on the unit.

The thermostat is factory set to switch on the blower at 120°F air temperature, and off at 90°F. The variable speed control knob located on top of the blower must be switched to the on position in order for the thermostat to activate the blower.

care and operation (continued)

The blower may be activated manually by pushing in the white button located on the thermostat in the upper right hand corner in the back of the stove. It is best to leave the thermostat setting on automatic and let the electronics on the unit function automatically.

The limit control on the thermostat is preset at 200° F. If the air temperature reaches 200° F at this point where the thermostat probe enters the unit, the air temperature being exhausted through the outlet grill is actually 250° F. Should the thermostat sense temperatures in excess of 200° F, it will automatically activate the electronic draft motor and reduce the amount of combustion air entering the unit, overriding the manual spin draft control until the unit air temperature drops below 200° F.

DANGER

Do not alter preset thermostat controls. This could change the unit's clearance to combustibles and cause unit to burn out of control.

In case of power failure, fan failure, or over fire the electronic draft control will automatically reduce the firing rate.

The manual spin draft control and the variable speed control on the blower work in conjunction with each other. The more turns you have the spin draft control open, the more air you should be moving through the unit with the blower.

It will take you a few fires to set the manual draft control and the variable speed control on the blower to the type of wood you are burning and the amount of heat you require.

The ceramic glass provided with the unit will withstand continuous temperatures of 1200° F; intermittent temperatures of 1400° F. Although the glass will withstand these high temperatures, you should not let wood burn directly against the glass. This could cause the glass to pit and crack.

IMPORTANT

It is recommended that you purchase a chimney thermometer to be installed on your stove pipe. Holding a temperature of 300° F will assure you of a efficient burn and a minimum of creosote build up in your chimney. See page 8.

Creosote buildup will occur on the glass as it will on the inside of the unit and the chimney. Most creosote buildup occurs when the fire is being started and when the fire is going out. To reduce creosote buildup on glass at this time, leave door open 1/2" and allow glass to heat up for a few minutes; then close fuel door. The hotter you burn, the cleaner the glass will stay. **ALWAYS BE PRESENT WHEN DOING THIS. THIS SHOULD BE THE ONLY TIME COMBUSTION AIR SHOULD BE ALLOWED TO ENTER THE UNIT OTHER THAN THROUGH THE SPIN DRAFT AIR CONTROL. DO NOT BURN WITH ASHPAN OPEN. THIS WILL OVERFIRE THE UNIT, AND CREATE A HAZARDOUS SITUATION.**

After the unit has cooled, the glass may be cleaned by dipping a wet piece of cloth into ashes and wiping it across the glass. If excessive buildup has occurred, use a non-abrasive cleaning solution and a razor blade for tough spots. Always apply the cleaning solution onto a cloth first, and not directly onto the glass. Overspray could harm the painted surface of the unit. Be careful not to scratch the glass.

The brass or nickel plated surfaces on your unit can easily be cleaned using a soft wet rag. Most of the plated surfaces have been protected with a coat of clear lacquer to keep them from tarnishing. Lacquer will not withstand the excessive temperatures of the door. The brass plated doors may be cleaned and polished with jewelers rouge. Do not use abrasive cleansers on plated or painted parts. Aerosol cans of 1200° F paint in matching colors is available for touch up and stove pipe painting, and for painting of accessories to match the stove.

Difficult times to use your heater are at the beginning or end of the heating season. For example, if you build a wood fire on a day when the outside temperature rises to 60°, you will have a lot of heat generated and nothing very useful to do with it.

Low heat demand will mean unusually slow burning creosote-producing fires.

If you must use wood during such times, the best thing you can do is build small fires or by using wood with a low heat value (poplar, for example). You may be able to avoid overheating and creosote making.

IMPORTANT

The Aurora is designed to operate most efficiently at a draft of .04 to .05 water column of up draft. If your draft exceeds .05 with your cast iron flue damper closed. It may be necessary for you to install a barometric damper. If your draft is less than .04, see page 8.

care and operation (continued)

TO START FIRE

Special Note: The first few fires should be small to properly season cast iron grate and door. Too large a fire may cause the casting to crack.

Crumple a liberal amount of paper on grate. Cover paper with a good supply of kindling. Fill heater with driest wood available and light the paper. Open damper wide. Combustion air is required above fuel bed.

When you have a good fire, close the damper to your liking.

When refilling heater, open damper completely to avoid smoke entering house when door is opened.

A little smoke may come into the room as you open the door to add more wood. You can reduce this by opening the door slightly for a moment before you open it completely. **IF THE HEATER BEGINS TO SMOKE MORE AS YOU OPEN THE DOOR YOU MAY HAVE A BLOCKED CHIMNEY.** (See Maintenance Suggestions)

When temperature is reached the blower will turn on automatically and distribute the heat.

CAUTION

Do not elevate fuel on any grate other than the grate provided with the unit.

CREOSOTE AND SOOT

The most critical nature of wood burning is the control of creosote and soot. This is especially important when there is a low demand for heat, such as in the fall or spring. A good understanding about the causes and cures for excess creosote and soot formation is essential to the operation of your heater.

Your heater, and for that matter, all types and makes of woodburning equipment will give trouble with creosote deposits under certain conditions. You should be aware of these conditions and avoid them.

When wood is burned slowly, it produces acids which combine with moisture to form creosote. It may build to a considerable thickness on the interior surface of the chimney and the chimney draft. Creosote is highly combustible in its solid and semi-liquid states. **A SERIOUS FIRE MAY START IF A SUFFICIENT CREOSOTE BUILD-UP IS PERMITTED.**

NOTE: Accumulations of creosote can be dissolved with a mixture of household ammonia and water, using a scrub brush or sponge.

Creosote condenses more quickly when the temperature of the flue gases is low. The amount of creosote deposited depends on:

- 1) the amount of moisture in the flue gases
- 2) the temperature of the stack
- 3) the rate at which the wood is burned
- 4) the amount of draft in the stack
- 5) how completely the combustible elements in the flue gases have been burned in the combustion chamber

Most problems with creosote are due to unseasoned wood, chimneys with low draft and cold walls, and/or a low rate of burning when little heat is required during the spring and fall months.

Moisture in the flue gases may be controlled by:

- Using properly seasoned firewood
- Mixing small pieces (preferably slab wood) with every full load
- Never using only large (usually less dry) wood during mild weather when combustion is relatively slow.

The temperature in the stack may be controlled by:

- Using as short a length of stovepipe as possible between the heater and the chimney.
- Using an insulated flue pipe to connect the heater to the chimney

The amount of draft in the stack may be controlled by:

- Having as few bends as possible
- Insuring adequate chimney height and preventing air leaks in it
- Eliminating external obstructions in the chimney outlet
- Having only one appliance per flue

CAUTION

Do not let ash pan overflow. This can cause early burn out of grate and effect operation of the heater.

CHIMNEY FIRE

In the event you should experience an uncontrolled fire in the heater, smoke pipe or chimney, do the following immediately:

- 1) Close all doors, dampers, air shutters, etc. on the heater. This will starve the fire from air and cause it to die down.
- 2) Close down slowly the manual damper in the flue pipe.
- 3) Close off all sources of air through the barometric damper.
- 4.) Call your local fire department as soon as possible.
- 5) Carefully inspect the stove, flue pipe, and chimney before putting back into operation.

CHIMNEY INSPECTION

The interior of the chimney should be inspected periodically throughout the heating season for soot and creosote build up. This can be done from the roof or with the use of a mirror at the chimney cleanout.

If the chimney needs cleaning, it is suggested that you try to get professional assistance.

POWER OUTAGE

The heater can be used during a power outage; but you must reduce the firing rate. Open the air damper only one full turn. Load the wood supply no higher than 1/3 the way up the door.

maintenance suggestions

DAILY

1. Keep area around heater free of combustible materials, flammable liquids, lint, etc. Do not store or use gasoline or cleaning fluids in same area where heater is located.
2. Do not allow excessive ashes or unburned materials to build up in fire box. Keep ashes cleaned from above and below grates. 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.
3. When in use check the door and ash pan gasket to be sure the door and ash pan are sealing tightly.

MONTHLY

1. Check blower motor and wheel to be sure they are clean.
2. Check electronic draft motor by unplugging the power cord and listening for humming sound. This means draft motor is functioning properly. Power cord should be unplugged during the off season in order to extend the life of the draft motor.

EVERY TWO MONTHS

1. They flue pipe between heater and chimney should be taken apart and cleaned. At the same time check closely for corrosion. **BE SURE FIRE IS OUT BEFORE INSPECTION AND CLEANING.**
2. Inspect chimney for soot or creosote build up. This is very important if you are new to woodburning. Clean the chimney if any build up is seen. A mirror and a flashlight will help to check the chimney.

There are various methods to clean chimneys. Cleaning brushes are most often used.

Use chemical cleaners with caution. Sulfur or salt based cleaners must not be used in this heater or in metal chimneys.

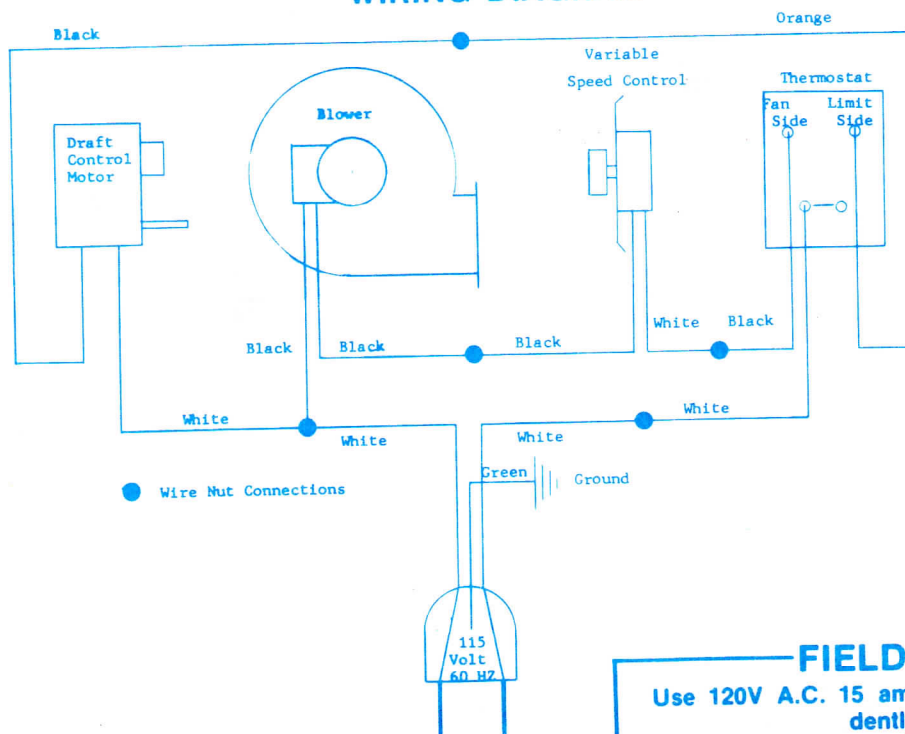
BEGINNING OF HEATING SEASON

1. Have a qualified service person inspect the heater, flue pipe, blower, and chimney to be sure they are in good working condition. **MAKE ANY REPAIRS NEEDED WITHOUT DELAY.**
2. Add 2 or 3 drops of SAE 30 oil to each bearing of motor. Too much oil causes dust and lint to build up and cause motor failure.
3. Check the seal of the exterior air intake enclosure to 6" rd. pipe. Check the seals of the chimney.
4. Remove the firebrick and grate from the unit and vacuum the air paths. If the firebrick are cracked or broken they should be replaced immediately.

AIR SUPPLY

1. In a mobile home installation, it is mandatory by law to bring exterior combustion air directly into the unit using the 6" round flange on the air intake assembly.
2. A tightly constructed home with well fitting windows, weatherstripping and storm sash has little air infiltration. No air will move up a chimney unless air enters the room containing the heater.
3. Ventilating fans move large volumes of air. If normal air infiltration is not great enough to satisfy the needs of a heater and ventilating fan, air will be drawn down the chimney creating a smoking condition. A fresh air intake must provide enough for both.

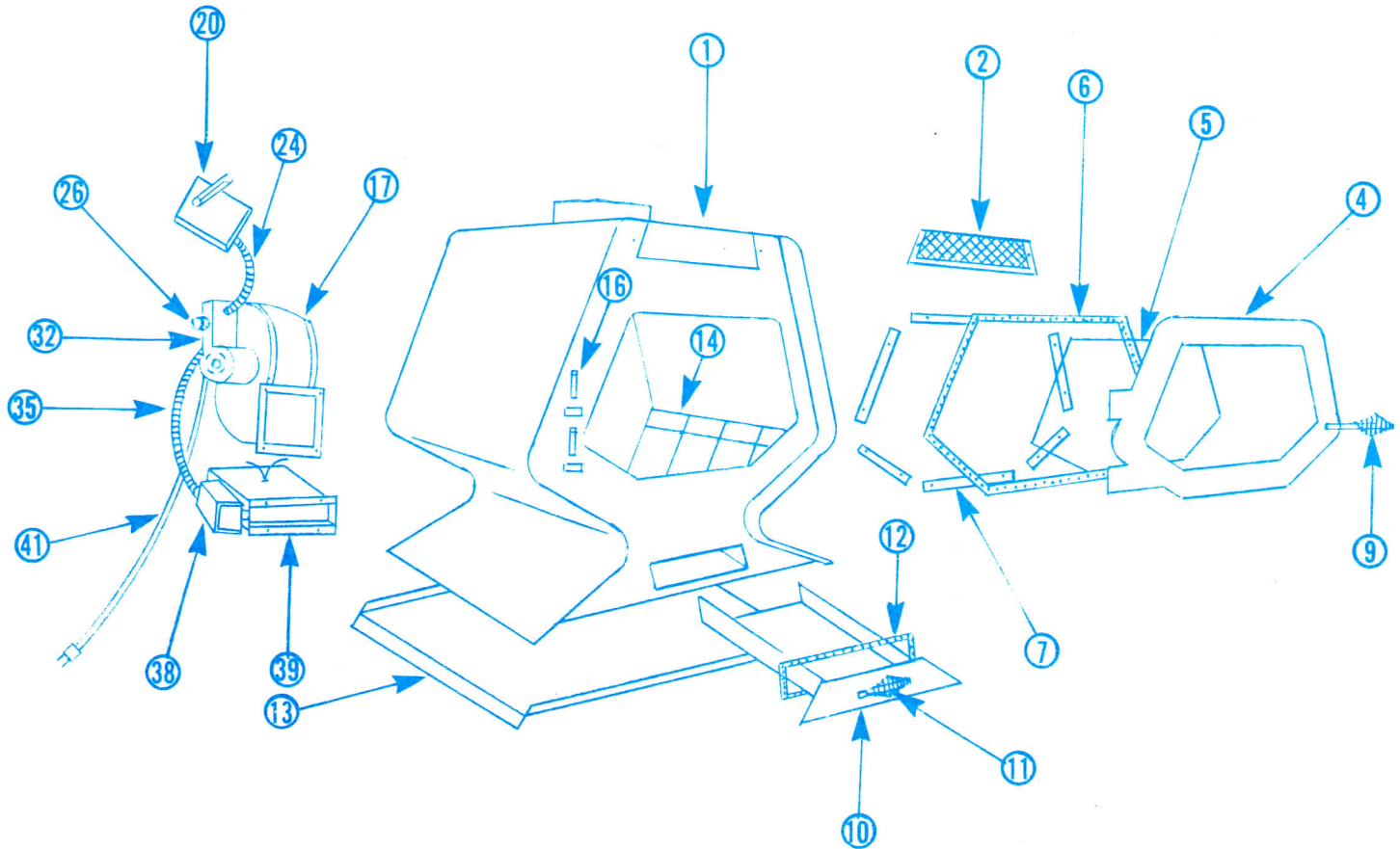
WIRING DIAGRAM



FIELD WIRING

Use 120V A.C. 15 amp branch circuit independently protected.

repair parts



Key No.	Part No.	Part Description
1	4001	Chamber Weldment
2	4002	Outlet Grill, specify nickel or brass
3	1001	#10 x 1/2 Screws for outlet grill, (2 req.)*
4	2001	Cast Iron Doors, specify nickel or brass
5	1002	Door Glass 1400°
6	1003	Glass Seal
7	4003	Glass Mounting Brackets
8	1004	Door Seal 5/8 rd.*
9	1005	Spring Handle, Door
10	4004	Ash Pan
11	1005	Spring Handle, Ash Pan, specify nickel or brass
12	1006	Ash Pan Seal, 3/8 rd.
13	3001	Floor Heat Shield
14	2002	Firebrick, (16 pcs. req.)
15	1007	Cast Iron Grate*
16	1008	Hinge Pins, (2 req.)
17	2003	Blower
18	1009	Blower Mounting Bolts, 1/4-20 x 1, (4 req.)*
19	1010	Tinnerman Clips for Mounting Blower, (4 req.)
20	2004	Thermostat and Fan Limit Control
21	1011	Fan Limit Mounting Bracket

Key No.	Part No.	Part Description
22	1012	Fan Limit Mounting Screws, #10 x 1/2, (2 req.)
23	1013	3/8" Straight Cable Connectors, (2 req.)
24	1014	3/8" Aluminum Cable, 8"
25	1015	18 gauge 105° AWG wire, 16", (3 pcs. req.)*
26	1016	Junction Box
27	3002	Junction Box Cover*
28	1017	Cover Screws 6-32 x 1/2", (2 req.)*
29	1018	Ground Screw 10-32 x 3/8"
30	1019	Wire Nuts, (5 req.)*
31	1020	1/2" Box Connector*
32	2005	Variable Speed Control
33	1021	Speed Control Knob*
34	1022	3/8" 90° Cable Connector*
35	1023	3/8" Aluminum Cable, 14"
36	1013	3/8" Straight Cable Connector*
37	1024	18 gauge 105° AWG Wire, 22", (2 req.)
38	2006	Draft Control Motor
39	4005	Air Intake Enclosure
40	1012	Air Intake Enclosure Mounting Screws #10 x 1/2, (4 req.)
41	1025	Power Supply Cord SJT, 6 ft.
42	1026	Cord Connector*

*Not Illustrated

WHEN ORDERING REPAIR PARTS ALWAYS GIVE THE FOLLOWING INFORMATION:

1. Part Number and A for Aurora, O for Orion
2. Part Description
3. Model Name or Number
4. Name of Item

Limited Warranty

GENERAL: During the time periods and subject to the conditions hereinafter set forth, Vulcan Fabricating Co., Inc. will replace with new furnace, stove, fireplace insert which proves defective due to defective materials or workmanship. At all times Vulcan Fabricating Co., Inc. shall have and possess the sole right and option to determine whether to repair or replace defective parts or components.

WARRANTY PERIODS: COMPLETE UNIT — One (1) year from date of installation. Except cast iron parts, firebrick, door glass, plating and paint.

THIS WARRANTY WILL NOT APPLY: a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided; b) to failures resulting from abuse, accident or negligence; c) to normal maintenance services and the parts used in connection with such services; d) to units which are not installed in the continental United States of America (excluding Alaska and Hawaii), and in accordance with applicable local codes, ordinances and good trade practices; e) if the unit is moved from its original installation locations.

SHIPPING COSTS: All in-warranty replacement parts will be shipped f.o.b. Vulcan Fabricating Co., Inc. option, from — or to a convenient delivery point selected by it near the place of installation, such as a local center. Owner will be responsible for any local cartage or other transportation costs.

LABOR, ETC., COSTS: Vulcan Fabricating Co., Inc. shall in no event be responsible or liable for the cost of field labor or other charges incurred by any customer in removing and/or reattaching any part or component.

HOW TO OBTAIN WARRANTY PERFORMANCE: Contact the nearest Vulcan Fabricating Co., Inc. distributor, whose name and location can be provided by:

Vulcan Fabricating Co., Inc.

P.O. Box 94, 864 West Street • Watertown, Wisconsin 53094

Telephone: 414-261-3550

HOWEVER, ANY REPLACEMENTS OR REPAIRS ARE MADE SUBJECT TO VALIDATION BY VULCAN FABRICATING CO., INC. OF IN-WARRANTY COVERAGE. Any item to be replaced under this warranty must be available in exchange for the replacement part.

WARRANTY EXCLUSIONS: Cast iron parts, door glass, plating, paint and firebrick. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

No warranties or representations at any time made by any representative of Vulcan Fabricating Co., Inc. shall vary or expand the provisions hereof.

LIABILITY LIMITATION: IN NO EVENT SHALL VULCAN FABRICATING CO., INC. BE LIABLE OR RESPONSIBLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES RESULTING FROM OR RELATED IN ANY MANNER TO THE FURNACE, STOVE, FIREPLACE INSERT OR PARTS THEREOF. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Warranty shall be completed immediately and retained by the Owner for presentation in the event of in-warranty failures. In the absence of other suitable proof of installation date, the effective date of this Warranty will be based upon the date of manufacture plus 30 days.

THE FACTORY WARRANTY REGISTRATION CARD MUST BE COMPLETED AND MAILED IN ORDER TO OBTAIN WARRANTY COVERAGE AND PERFORMANCE. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

 **fabricating co., inc.**
P.O. Box 94
864 West Street, Watertown, Wisconsin 53094


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864 West Street, Watertown, Wisconsin 53094
fabricating co., inc.

NAME OF OWNER _____
ADDRESS _____
CITY _____ STATE _____ ZIP CODE _____
MODEL NUMBER _____
SERIAL NUMBER _____
DATE OF INSTALLATION _____
NAME OF DEALER _____
ADDRESS _____
CITY _____ STATE _____ ZIP CODE _____

This warranty covers furnaces, stoves, fireplace inserts used as a primary or supplementary heating system in homes, garages and hunting cabins as well as furnaces used to supplement another forced air furnace.