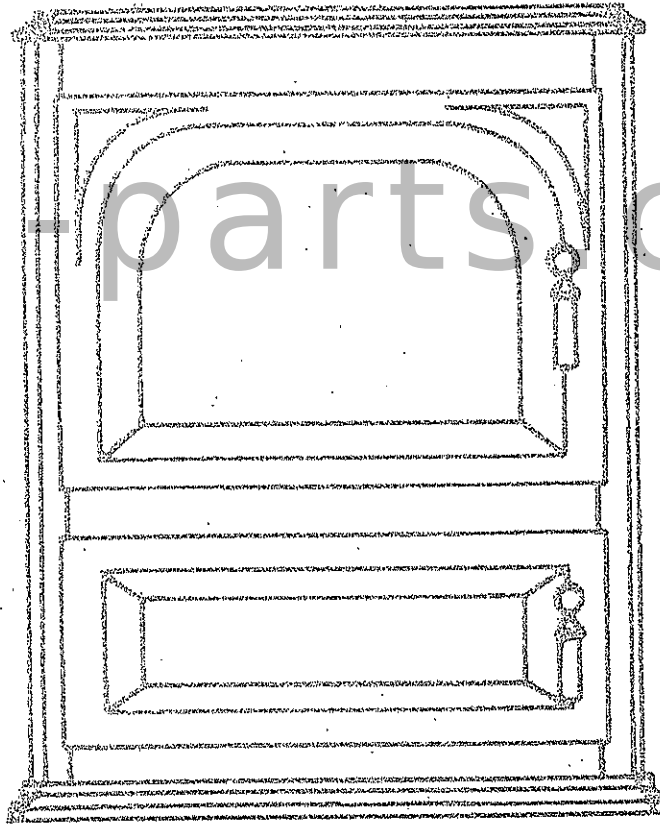


Reliance™ Pellet Stove



Model #2220 Owner's Manual
For use in North America

VERMONT CASTINGS, INC.

SAFETY NOTICE: IF THIS RELIANCE PELLETT STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

Welcome

Congratulations on your choice of a Vermont Castings Reliance. With this purchase, you have made a commitment to make the hearth a place of warmth, beauty and comfort in your home. At Vermont Castings, we share that joy and appreciation for the hearth, and we show it in all our cast-iron stoves and fireplaces.

As you become acquainted with your new stove or fireplace, you will find that its visual appearance is matched by its functionality, due to cast iron's unique capability to absorb and radiate heat.

Also, Vermont Castings products are among the cleanest-burning wood stoves and fireplaces available today. And as an owner of a Vermont Castings stove or fireplace, you are making a strong statement for pollution-free energy. But clean burning depends on both the manufacturer and the operator. Please read this manual carefully to understand how to operate your stove or fireplace properly.

At Vermont Castings, we are equally committed to your satisfaction as a customer. That is why we maintain an exclusive network of the finest dealers in the industry. These dealers are chosen for their expertise and dedication to customer service. They are factory-trained to know the most minute detail of every Vermont Castings product. We also maintain an in-house technical service staff to answer questions about your particular installation or product needs. Feel free to contact your Authorized Vermont Castings Dealer or us anytime you have a particular question about your stove or its performance.

Be assured that your cast-iron Vermont Castings stove or fireplace has been made with the utmost care and will provide you with many years of service.

This manual contains valuable instructions on the installation and operation of your Vermont Castings stove or fireplace. It also contains useful information on maintenance and assembly of this product. We urge you to read the manual thoroughly and to keep this manual as a reference.

Sincerely,

*All of us
at Vermont Castings*

Table of Contents

Introduction	2
Table of Contents	3
Operation	4
Maintenance	7
Installation	10
Specifications	17
Exploded View	19
Parts List	20
Troubleshooting	20-21
Wall Thermostat Installation.....	22
Electrical Diagram.....	23
Warranty	24

This manual describes the installation and operation of the Reliance Model #2220 pellet burning room heater. This heater is exempt from Environmental Protection Agency emissions limits based on air-to-fuel ratio. Under specific test conditions this heater has been shown to deliver heat at a rate ranging from 6,500 to 35,000 Btu's/Hr.

We recommend that you hire a professional solid fuel stove installer to install your Reliance, or to advise you on the installation should you attempt to install it yourself.

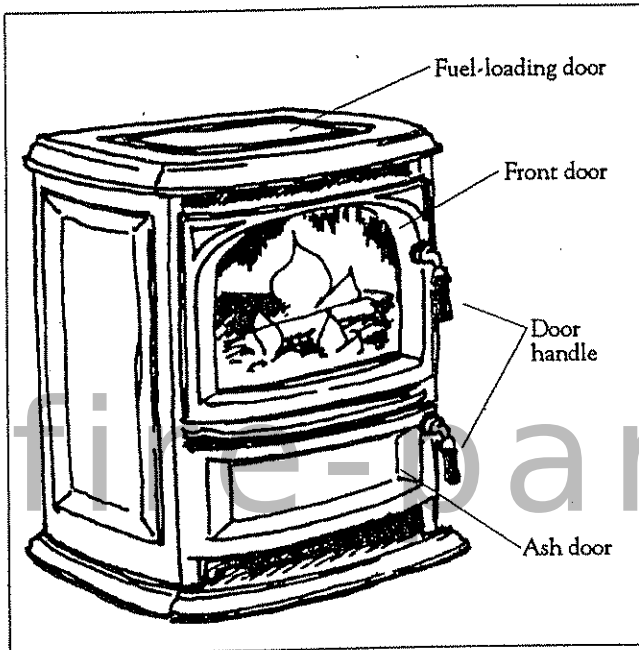
The Reliance is listed by Underwriters Laboratories and Underwriters' Laboratories of Canada.

The Reliance is listed for burning wood or cardboard pellets. Do not burn other fuels. The Reliance is not listed for installation in mobile homes.

Save These Instructions.

SAFETY NOTICE: IF THIS RELIANCE PELLET STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

Operation



The controls of the Reliance have been designed for convenience and accessibility.

The Reliance Controls

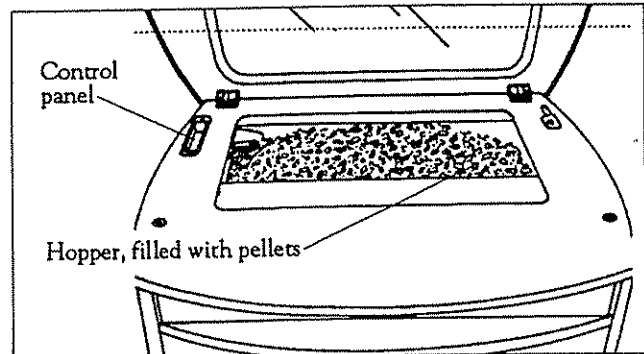
Three Special-Function Doors for Easy Access

A Top Fuel-Loading Door lifts to open and provides convenient access to the hopper for loading pellets. A Front Door opens for convenient access to the burn pot for regular cleaning. Below the front door, an Ash Compartment Door opens to provide access to the ash compartment for easy ash removal. Both the fuel-loading and the front doors are equipped with large Viewing Windows: tempered glass for the fuel-loading door, and ceramic glass for the front. Both the front and ash-compartment doors close securely with an adjustable door latch.

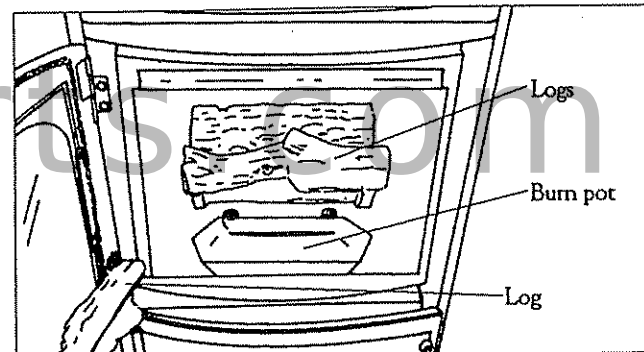
Separate Controls for Starting, Stopping, and Regulating the Fire

When the fuel-loading door is raised, the integrated Control Panel is accessible in the left rear corner of the top. There is a separate control for each of the following functions: starting the fire; stopping the fire; adjusting the heat level; and selecting whether the controlling thermostat is on the stove or on the wall.

The green Start Switch is at the top of the control panel and activates the exhaust fan and the feed mechanism when pushed. It is activated only when starting a new fire.

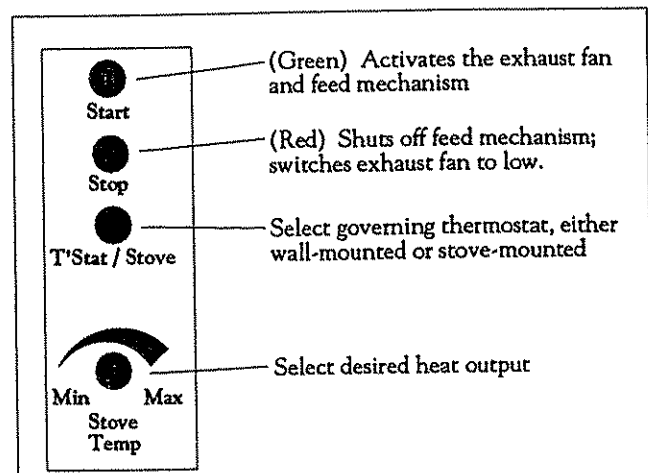


A top loading door allows convenient access to the hopper.



The burn pot may be reached easily through the front door for regular cleaning.

The red Stop Switch is the second control in the panel, and it de-activates the feed mechanism and switches the exhaust fan to low when pushed. The exhaust fan automatically shuts off when the stove cools.



All operating functions of the stove are activated from a single integrated control panel.

The Heat Output Selection Switch is the third control. It enables you to choose between a stove-mounted control or a wall-mounted thermostat to regulate the stove's heat output.

The Heat Output Control is the fourth control at the bottom of the panel, and it is used to select the amount of heat you desire. It features a variable range of settings between the minimum and maximum extremes.

Generally, a higher heat setting will result in more fuel being burned in a shorter period of time than a lower setting. A lower heat setting will produce longer, lower-level fires.

When the wall thermostat calls for heat, the stove will run at full output; when it does not call for heat, the stove will run at the setting at which the Heat Output Control is set.

IMPORTANT: WHEN USING THE WALL THERMOSTAT MODE, THE HEAT OUTPUT CONTROL MUST BE SET TO "MIN." (OR LOW).

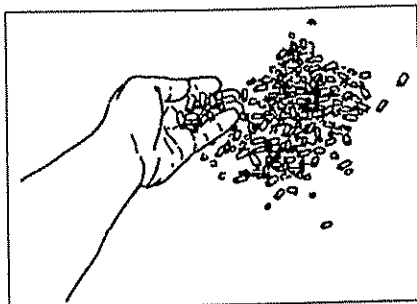
How To Operate the Reliance

Burn the Recommended Fuel

The Reliance is designed to burn only natural wood pellets, or pure cardboard pellets; do not burn fuels other than those for which it is designed.

Pellets should be stored under cover to maintain dryness. Pellets that are swollen or enlarged from dampness will not feed properly. Even for short-term storage, keep wood pellets a safe distance from the heater and out of the areas around the heater used for refueling and ash removal.

Avoid burning pellets that have crumbled while in transit into a high percent of "fines," a powdery sawdust-like residue sediment. For best results, burn quality low-ash pellets, preferably with an ash content of 1% or less.



The hopper will hold up to 48 pounds (21.7 kg.) of pellets.

Provide Adequate Air for Combustion

In some newer homes that are well-insulated and weather-tight, poor draft may result from insufficient air in the house. In such instances, an open window near the stove on the windward side of the house will provide the fresh air needed.

The Reliance is not listed for a direct outside air connection.

Use the Temperature Settings that Work Best for you

No single control setting will fit every situation. The same setting may produce different results in different

installations, depending on the heating characteristics of the home, the quality of the fuel, the amount of heat desired, and how long you wish the fire to burn.

When first using the stove, try different heat output settings, and become familiar with how much heat to expect and how long you should expect the fire to last. It may take a week or two to determine the amount of heat and the length of burn you should expect from various settings.

Do not for any reason attempt to increase the firing of your heater by altering the openings outlined in these directions.

The stove's paint and cement may emit a "new, hot metal" odor during the first few fires. If necessary, provide extra ventilation near the stove by partially opening a door or window.

How To Start and Maintain a Fire

KEEP VIEWING AND ASH REMOVAL DOORS TIGHTLY CLOSED DURING OPERATION.

STEP 1. If the stove has been operated previously, make sure all key internal components are clean.

This step is not necessary if your stove is brand new. However, once a stove has been used, it is necessary to scrape carbon deposits from the burn pot surfaces each time before lighting it (the optional Reliance Maintenance Kit includes a special Burn Pot Scraper designed for this purpose). Clean any ash from the burn pot, including from the ash drop beneath it. In subsequent operation, regularly remove ash from the front lip of the burn pot so that it does not build up behind the front log; do not allow the spaces between the logs to close up with ash.

Check that no pellets or debris have been left to prevent the loading door from closing properly. (Repeat this check after every fuel loading). A tight seal of the door to the top plate is essential for proper operation of the stove.

STEP 2. Lift the top fuel-loading door and fill the hopper with wood or cardboard pellets (NOTE: Pellets must be dry; wet, soft, swollen pellets will not work.)

STEP 3. Place 2-3 handfuls of pellets into the burn pot, taking care not to cover the rows of air holes.

STEP 4. Moisten the pellets with Wood Pellet starting fluid or gel pellet starter; ignite the pellets with a match, and close the front door. NOTE: USE ONLY WOOD PELLET STARTING FLUID OR GEL PELLET STARTER.

CAUTION: Do not use any other fluid than that specified to start the fire. DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA, OR ENGINE OIL. Also,

6 Operation

never use 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.

STEP 5. Close the top fuel-loading door, wait 10-15 seconds, and turn the stove on by pushing the "Start" button (the green top button on the control panel). When this button is pushed, it activates the exhaust fan and the automated feed mechanism..

STEP 7. Adjust the Heat Output Control for the heat output you desire. **NOTE:** If you are using the wall thermostat, set the Heat Output Control to low.

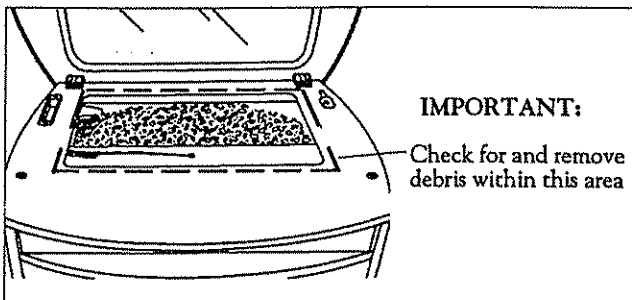
You'll soon find out that this stove is **HOT WHILE IN OPERATION!** KEEP CHILDREN, CLOTHING, AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

Refueling a Wood Pellet Fire

STEP 1. Remove ash from the front lip of the burn pot so that it does not build up behind the front log. Make sure the spaces between the logs have not closed with ash.

STEP 2. Lift the top fuel-loading door and fill the hopper with wood pellets.

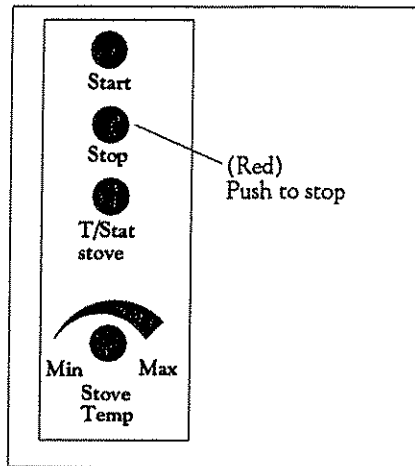
Check carefully to confirm that no pellets or debris have been left to prevent the door from closing properly. Close the fuel-loading door.



Before closing door after each loading, check for debris that may affect seal.

STEP 3. Adjust the Heat Output Control for the heat output you desire. **NOTE:** If you are using the wall thermostat, set the Heat Output Control to "min." (or low).

How To Turn Off the Stove



To turn off the stove, simply raise the fuel-loading door and push the "Stop" (red) switch, the second switch on the control panel.

Remove and Store Ash Safely

Check the ash pan before reloading the stove. If the ash level is close to the top, empty the pan.

NOTE: To prevent the spillage of hot pellet coals into the room during ash removal, de-activate the auger by pushing the red "Stop" button. Activate the auger by pushing the green "Start" button once the ash removal process is complete.

Before replacing the ash pan, clear away any ash or embers that have spilled over the sides and back of the pan. Be sure the handle on the ash pan is lowered before inserting it back into the stove.

Empty the ash drawer regularly, typically every couple of days to once a week or longer. The frequency will vary depending on how hot you run your stove: the hotter the fire, the more fuel you burn, and the faster ash will accumulate. Higher ash-content fuels will accumulate more quickly as well; in fact, there can be a dramatic difference in ash accumulation between high-ash and low-ash fuels.

Ash may contain hot coals and must be treated with extreme care.

Always Dispose of Ash in a Safe Manner

Ash should be removed frequently and placed outdoors in a metal container with a tight-fitting lid. The closed container of ash should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ash is disposed of by burial in soil or otherwise locally dispersed, it should be retained in the closed container until all cinders have thoroughly cooled.

CAUTION: Never use a vacuum cleaner to remove ash from the stove; always remove and dispose of the ash properly.

Maintenance

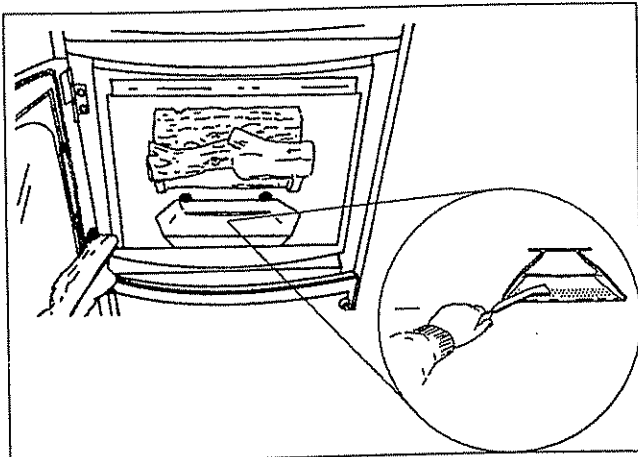
For Best Heating Performance, Clean the Reliance Regularly

Like any quality high-performance machine, the key internal components of the Reliance must be kept clean for the stove to perform at its best. Three procedures in particular are vital to ensure optimum combustion and maximum heat transfer: the burn pot must be scraped to prevent the build-up of unwanted carbon deposits; ash must be cleaned regularly from beneath the burn pot; and the heat exchanger tubes must be brushed periodically.

These maintenance procedures can be done most easily with the special tools provided in the optional Reliance Maintenance Kit, and are best done as a regular part of the stove-tending activity cycle.

Scrape the Burn Pot before Lighting

Use the Burn Pot Scraper to thoroughly scrape the surfaces of the burn pot before each lighting of the Reliance. After scraping, close the door and turn on the stove. Then, open the door quickly and close it a few inches to clear the burn pot holes. Any holes that have not cleared with this procedure should be cleared manually with a narrow probe such as a tooth pick or the end of a coat hanger.



Scrape the carbon deposits from the burn pot as needed.

Also, scrape the burn pot any time the pellet flow appears abnormal. (NOTE: Be sure to wear protective stove gloves if the unit has been operating, since the burn pot and surrounding area may be hot.)

The scraper may be used as a general-purpose tool for other tasks as well. Use it to knock off the ash buildup that may form on the front lip of the burn pot with some fuels. Or, when wrapped completely with a dry cloth it can be used to clean the glass. It can even serve as a clearing tool if your auger hangs up, a problem that can occur as a result of using pellets that are too long.

Clean Ash from Beneath the Burn Pot

Ash may find its way through the air holes into the bottom of the burn pot and should be removed on a regular basis. The frequency may vary depending on the amount of fuel you burn. To start, clean the ash every two weeks. If this schedule is not enough, clean more frequently. Or, if there is little visible ash, a longer time between cleanings may be acceptable.

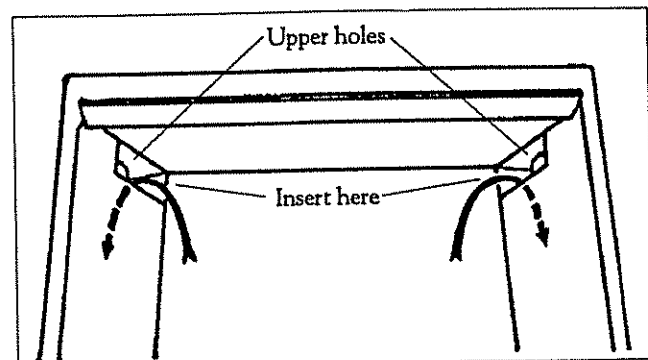
The best clue to cleaning is the performance of the stove itself. If you notice a decline in performance or in the appearance of the flame, it is time clean the ash following this procedure:

- Wait until the stove is no longer hot.
- Open the ash compartment door and remove the ash pan.
- With a 7/16" wrench, reach under the burn pot and loosen the bolt that is located in the center of the bottom.
- Move the lever that is held by the bolt to the right. This will expose a hole approximately 3/4" (18 mm) in diameter through which the ash will fall.
- Tap the sides of the burn pot to dislodge any clinging ash with a rubber mallet, or with a block of wood tapped by a hammer. CAUTION: To avoid damage, do not strike the burn pot directly with a metal hammer.
- Move the lever back to the left to cover the hole and tighten the bolt.
- Clean up the ash that was removed, replace the ash pan, and close and latch the ash compartment door.

Cleaning the Heat Exchanger Tubes

For optimum performance from your Reliance pellet stove, key interior passageways should be cleaned every 4-6 weeks (or as needed). Wear old clothing to protect against soiling from carbon deposits, use the versatile Reliance Stove Brush, and follow the directions below to make this cleaning routine a regular part of your maintenance procedure.

Step 1. Locate the heat exchanger access ports.



Look in the upper left and right corners of the firebox to locate the openings of the heat exchanger tubes.

The access ports for the heat exchangers are four rectangular openings in the firebox located in the upper and lower and left and right back corners.

The two lower holes are covered with metal doors bolted in place. Rotate the doors up and out of the way. If necessary, loosen the 1/4-20 bolts that secure them.

Step 2. Clean the heat exchangers.

Hold the Reliance stove brush so that the ends point upward, and insert it through either of the upper holes.

NOTE: If the heat exchanger tubes are sufficiently clogged to make inserting the brush difficult, insert the wire handle end opposite the brush first and use it to clear a passage.

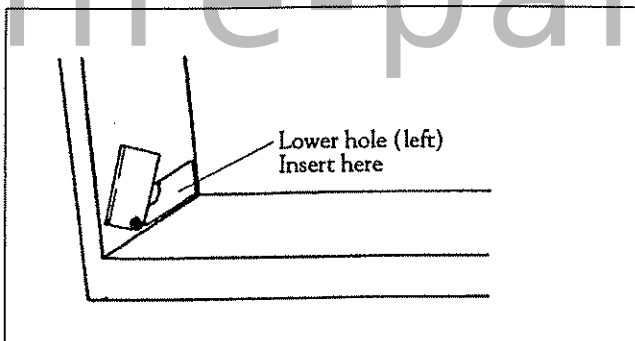
When the brush contacts the inner of the heat exchanger tubes, work it down into the passage between the inner and outer tubes. Then, scrub the front half of the tubes with an up-and-down motion.

Next, withdraw the brush and reverse it. Insert the brush once again and scrub the back of the tubes as you did the front.

Withdraw the brush again and remove the soot and ash from the lower opening.

Step 3. Clean the lower exhaust manifold next.

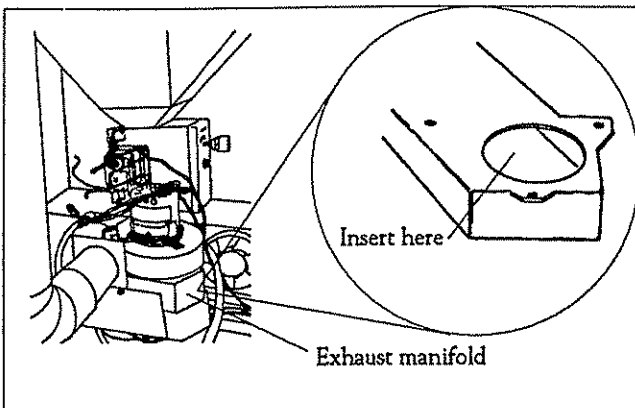
These passages start at the lower openings in the firebox and extend rearward and toward the center of the stove.



Insert the brush in the lower hole.

To clean them, insert the brush in either of the lower holes with the tip of the brush pointing toward the center. Scrub with a side-to-side and in-and-out motion to loosen the soot and ash, then draw the ashes towards the opening. Remove the ashes. A shop-type vacuum works well for this.

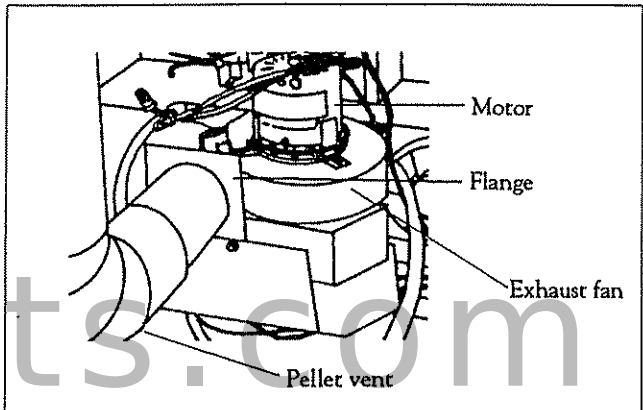
Step 4. Clean the rear exhaust manifold last.



The exhaust fan will need to be removed prior to this step. For directions, see the following section, "Servicing the Exhaust Fan and Motor".

Scrub all walls of the passage through the large opening. Clean as far forward and to each side as the brush will reach. Flip the brush over and use the point to get into the left and right branches of the passages toward the front of the stove. When the carbon deposits have been dislodged, use the brush to draw them towards the hole and remove them.

Servicing the Exhaust Fan and Motor

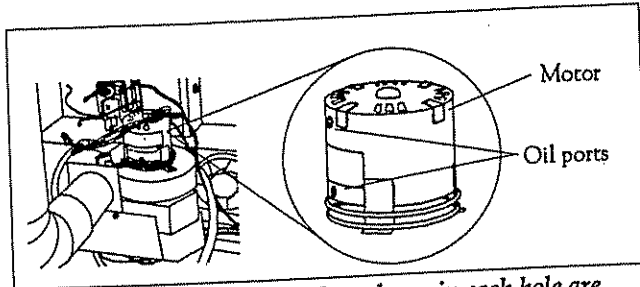


Remove the motor and exhaust fan as a unit for servicing.

Once a year, remove as a unit the exhaust fan and the motor mounted to its top for servicing. You will need a socket wrench with a 7/16" socket and a 6" extension, a 7/16" open-end wrench, and a Phillips screwdriver. Since you will be working behind the unit, slide it forward or angle it so that you have about 3' of clearance to maneuver. Follow these steps:

1. Disconnect the power cord.
2. Disconnect the pellet vent from the exhaust manifold flange.
3. Remove the six Phillips screws that hold the back panel to the Reliance, and remove the panel.
4. Remove the three 7/16" bolts that hold the motor/fan assembly to the exhaust manifold. Each is secured by a nut on the bottom. The bolt on the right (7/16" length) is easily accessible. Removing the bolt nearest you to the rear (7/16" length) will require the 6" socket extension. The bolt on the left is substantially longer than the other two (2-3/4") and extends all the way through the exhaust manifold.
5. Remove the four sheet metal screws that secure the flange of the motor/fan assembly to the exhaust manifold flange.
6. Slide the unit to the right and out of position for servicing.
7. Clean any dust, carbon deposits, or fly ash from the fan with a vacuum cleaner nozzle.

8. Lubricate the motor bearings through the two rubber-gasketed oil ports located one above the other on the side. Apply three drops of lubricating oil equivalent to a 20W non-detergent motor oil, such as Anderol 46S, to each oil port.



Do not over-oil the motor; three drops in each hole are sufficient.

9. Replace the motor fan assembly to its position. Insert the bolts that hold it and thread on the nuts, but do not tighten. There is only finger-tip access to the bottom of the rear-most bolt, so mounting the nut may require more than one try.

10. Insert the four sheet metal screws that secure the flange of the motor/fan assembly to the exhaust manifold flange; turn them in sufficiently to hold, but not tight.

11. Tighten the three 7/16" bolts.

12. Tighten the four sheet metal screws.

13. Replace the back panel and secure it with the six sheet metal screws that you initially removed.

14. Plug in the power cord.

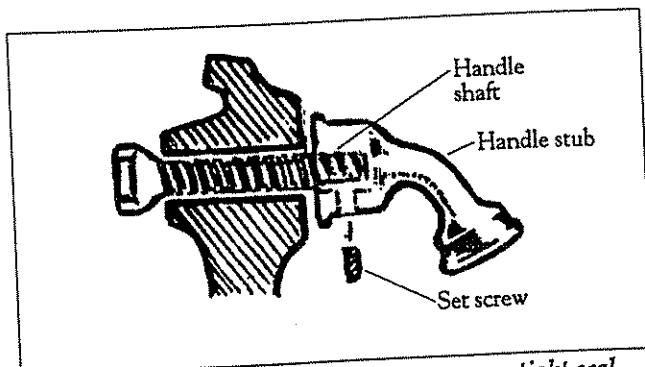
Cleaning the Pellet Vent

Inspect the pellet vent twice monthly and remove carbon deposits and fly ash as needed.

Disconnect the pellet vent from the Reliance; insert an appropriately-sized brush into the vent and pass it back and forth several times to dislodge any residue. Sweep up any accumulation with a vacuum cleaner.

Reapply high-temperature silicon where needed.

Check the Top Load Door Seal Each Time You Add Fuel



Tighten the door latch periodically to ensure a tight seal.

Before closing the top load door after each loading of pellets, remove any pellets or debris around the top plate that could interfere with the seal. A good seal in this area is particularly important for proper stove performance.

Adjust the Door Latches Needed

The door latch mechanism consists of a handle stub containing a set screw, a threaded handle shaft, and a latch. The handle shaft is ground flat across the threads on one side.

Properly assembled, the shaft is threaded through the door frame from the inside outward, and then into the handle stub. It is locked in place when the set screw is tightened against the flattened surface of the shaft.

To tighten the door, turn the handle shaft one revolution counter-clockwise into the door and the handle stub, and re-tighten the set screw.

Test and Repair the Door Gaskets

If the door will not tighten sufficiently after the latch has been adjusted, try "adjusting" the gasket in the area needing attention. Pack more cement or a smaller diameter gasket into the channel beneath the gasket so that the main gasket is raised and makes contact with the door frame. This procedure should solve the problem. If it doesn't, replace the gasket following these steps:

- Wearing safety goggles and a dust mask, remove the original gasket by grasping an end and pulling firmly.

- Use a wire brush or the tip of a screwdriver to clean the channel of any remaining cement or bits of gasket.

- Apply a thin bead of stove cement in the newly-cleaned groove.

- Pack the gasket into the groove. Wait until you are a couple inches from the end before you cut it.

Test the gasket by closing the door on a slip of paper. A good seal will provide resistance when you try to pull the paper out. Adjust the gasket in any areas where an inadequate seal is evident.

All rope-type gasketing used in the Reliance is made of fiberglass. The gasket size for the front and ash doors is 3/8" diameter. For the top load door, the gasket is a 1/8" x 1/2" strip gasket. Contact your Vermont Castings' dealer to obtain the right replacement gasket.

Avoid Damaging the Glass

Do not abuse the glass in either door by slamming the door shut or by striking it with a hard object, and never operate your stove if it has damaged or broken glass. If you need to replace the glass, use only glass provided by Vermont Castings.

Replace Broken Glass Immediately

Prepare to replace the glass in your stove by first clearing a large flat area nearby to use as a work surface. Place in order the pieces that you disassemble. This will be a great

help when you put the pieces back together.

To remove the glass:

- Open the front door. Carefully remove the front log by lifting it upward from its holder, and put it aside in a safe place.

- Holding the glass with one hand to prevent it from falling out, use the other to remove the Phillips-head screws that hold the stainless steel glass retaining clips on the left and right sides of the glass. Remove the clips and lift the glass.

- Remove the old gasket.

To install the new glass:

- Place a new piece of 3/16" gasket around the perimeter of the frame for the glass to rest on.

- Center the new piece of glass on the gasket.

- Position the glass retainer clips, and fasten in place with the 7/16" bolts you previously removed. Tighten the bolts alternately. Do not over-tighten.

Reliance Maintenance Schedule

Before Lighting a New Fire

- Scrape carbon deposits off burn pot surfaces.

Daily

- Fill hopper with pellets.
- Check for and remove debris around top plate before closing top load door.
- Scrape carbon deposits off burn pot as needed.
- Empty ash pan if necessary.

4-6 Weeks or as Needed

- Clean heat exchanger tubes
- Check gaskets for wear, and repair/replace as needed.

As Needed

- Scrape carbon deposits off burn pot surfaces.
- Remove fly ash from logs using an extremely soft brush or a soft brush attachment on a vacuum cleaner.
- Inspect the pellet vent and remove carbon deposits and fly ash.
- Adjust door latch if necessary.

Annually, At End of Heating Season

- Check gaskets for wear, and repair/replace as needed.
- Clean any fly ash from heat exchanger tubes.
- Clean any fly ash from vent pipe.
- Clean combustion fan.
- Touch up the black paint.
- Oil the motor

fire-parts.com

Installation

SAFETY NOTICE: IF YOUR RELIANCE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. FOR SAFETY, FOLLOW ALL INSTALLATION, OPERATION AND MAINTENANCE DIRECTIONS. CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

Stove Installations must be Safe and Legal

Before you begin an installation, review your plans to see that:

- Your stove will be far enough from combustible material to meet all clearance requirements.
- The floor protector satisfies the requirements.
- You have all necessary permits from local authorities.

Your local building official is the final authority for approving your installation as safe and determining that it meets local and state codes.

The metal label permanently attached to the back of your Reliance indicates that it has been tested to current UL and ULC standards, and gives the name of the testing laboratory. Clearance and installation information is also printed on the label. Local authorities generally will accept the label as evidence that, when the stove is installed according to the information on the label and in this manual, the installation meets codes and can be approved.

Codes vary in different areas, however. Before starting the installation, review your plans with the local building authority. Your local dealer can provide any additional information needed.

For any unresolved questions about installation, refer to the National Fire Protection Association's publication *ANSI/NFPA 211-1988 Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances*. In Canada, the equivalent publication is *CSA CAN-B365, Installation Code for Solid Fuel Burning Appliances and Equipment*. These standards are the bases for many national codes. They are nationally recognized and are accepted by most local authorities. Your local dealer or your local building official may have a copy of these regulations.

Important: Failure to follow these installation instructions may result in a dangerous situation, including a chimney or house fire. Follow all instructions exactly, and do not allow makeshift compromises to endanger property and personal safety.

Moving the Reliance

The Reliance is heavy and must be handled with care to prevent bodily injury as well damage to the home or its furnishings.

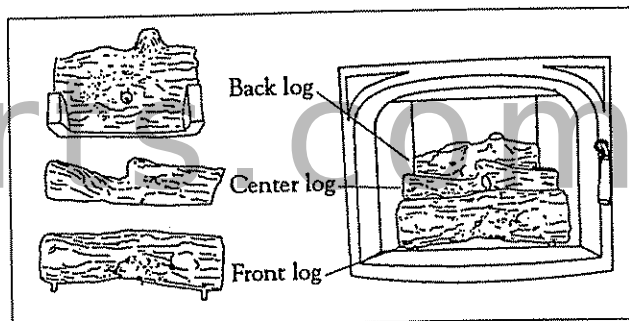
When a hand truck is used to help move it, the Reliance ash lip should be removed first. Remove the ash lip by unbolting it from the front. Then, tilt the stove back enough to slide the hand truck underneath from the front.

Installing the Optional Wall Thermostat

See Appendix A on page 16.

Installing the Logs

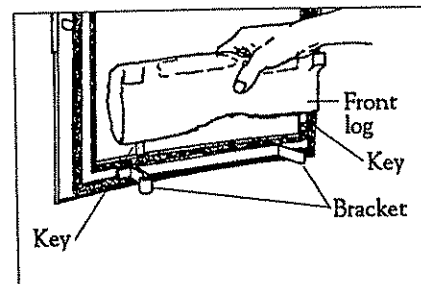
Handle the logs carefully to avoid damaging them. Begin by noting their proper terms by referring to the illustration below and follow this procedure:



The Reliance log set consists of these three pieces.

- Open the front door and locate the back log. It has been installed at the factory.
- Install the center log on the back log by matching the two notches on the center log's back side to the flattened platforms on the back log that are designed to accommodate it.

• Hold the front log with its log texture against the glass of the front door and line up the two keys on the bottom with the round log brackets mounted on the front door.



The front log mounts in round brackets attached to the front door.

CAUTION: If the log keys do not align with the bracket precisely, do not bend the log to force the fit. Rather, carefully bend the bracket the required amount.

• Close the front door carefully, checking to confirm that the logs have been installed properly and do not push against each other when the door is fully closed.

Venting Requirements

There are several options available for the installation and venting of a Reliance Pellet Stove, depending on whether installation is new or a modification of an existing one. The requirements that dictate what kind of venting to use vary in the United States and in Canada.

In the United States, you must connect the Reliance directly to a 3" (80 mm) or 4" (100 mm) diameter, UL Listed, Low-Temperature Type L Vent suitable for use with pellet fired appliances and/or UL listed residential-type and building heating appliances; or, as an alternative, connect to a lined (or appropriately relined) masonry chimney that meets local codes.

In Canada, connect only to a listed pellet vent or to a chimney lined with a 3" (80 mm) or 4" (100 mm) diameter solid-fuel type liner.

Complete pellet venting systems are available from a number of manufacturers such as Metalbestos or Simpson Dura Vent and usually can be supplied by your local dealer. Follow the installation instructions of the chimney manufacturer exactly as you install the chimney.

Many pellet vent manufacturers include the materials and instructions for sealing around the joints where the vent sections connect to prevent possible smoke leakage into the home. If your supplier has no provisions for this, you should do it yourself.

Use a RTV-type caulk with a minimum temperature rating of at least 400° F. (204 C.), and thoroughly seal around the exterior of each crack formed where sections are joined.

Sealing the joints is essential in forced-draft, "positive pressure systems" such as the one employed by the Reliance and most other pellet stoves.

For a safe and proper installation, the venting shall conform to the following guidelines by not being:

- Within 72" (1.8 m) of a mechanical air supply inlet to a building.
- Above a gas meter/regulator that is within 36" (900 mm) horizontally of the vertical center line of the regulator.
- Within 72" (1.8 m) of a gas service regulator vent outlet.
- Less than 12" (300 mm) above grade.
- Within 40" (1 m) of a building opening or air inlet of another appliance.
- Within 40" (1 m) of the property boundary.

In addition, Canadian regulations specify that the venting for installations in Canada shall not exceed 48" (1200 mm).

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

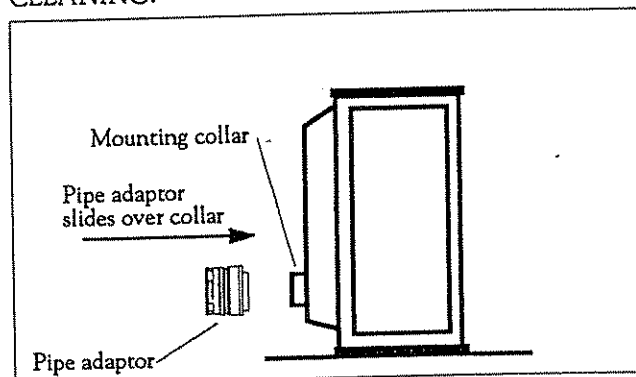
Attaching the Pellet Vent to the Reliance

The pellet vent attachment collar that is mounted on the lower rear of the Reliance is sized so that pellet vent pipe adaptor fits neatly over it.

The pipe adaptor should be secured to the collar with three sheet metal screws. Drill the flange with a powerful drill and a 1/8" (3 mm) drill bit. The flange of the collar is made of heavy gauge steel.

Seal between the pellet vent and the flue collar in the same fashion as described for the venting sections in the preceding section: Use an RTV-type caulk with a minimum temperature rating of at least 400° F. (204 C.).

IMPORTANT: APPLY THE SILICON ONLY TO THE EXTERIOR OF THE JOINT; IF APPLIED TO THE FLUE COLLAR ITSELF OR TO A LARGE INTERNAL AREA, IT MAY BE VERY DIFFICULT TO SEPARATE THE JOINT FOR SUBSEQUENT INSPECTION AND CLEANING.

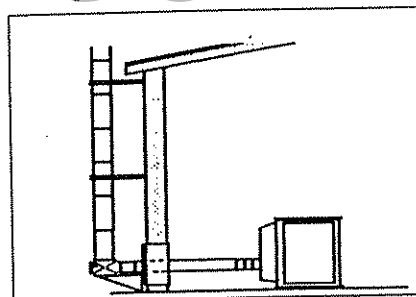


The pellet vent slides over the mounting collar and is secured with three sheet metal screws.

Wall Pass-Throughs

Whenever possible, design your installation so the connector does not pass through a combustible wall. If you are considering a wall pass-through in your installation, check with your building inspector before you begin to determine what local regulations apply.

The pellet vent manufacturer will supply the components necessary for passing through a combustible wall. Confirm that wall pass-through components have been tested and listed for use in wall pass-through applications, and follow the chimney manufacturer's installation instructions exactly.



When passing through a wall, use only approved wall pass-through devices provided by your pellet vent manufacturer and follow the installation instructions exactly.

Direct Venting Through an Exterior Wall

Venting the Reliance horizontally through a wall behind it is a cost-effective installation that can be accomplished with a minimum of carpentry work.

There are three options for configuring the vent pipe in such installations: a horizontal direct vent, a horizontal direct vent with a vertical extension that terminates at least two feet below the roof overhang, and a horizontal direct vent with a vertical extension that extends above the roof overhang.

Horizontal Direct Vent

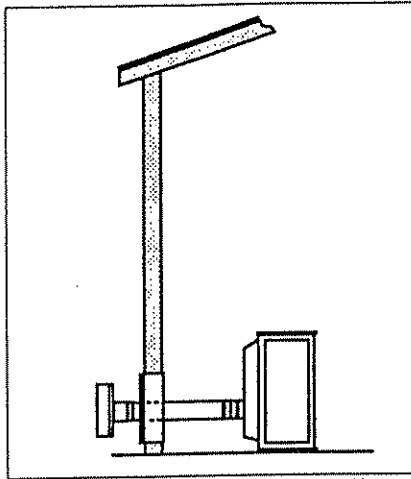
With the first option, the venting terminates on the same plane as the pellet vent attachment collar with the installation of a vent cap at the end of the pipe's horizontal run. The horizontal run must not exceed the maxi-

mum specified by either the pipe manufacturer or local building codes.

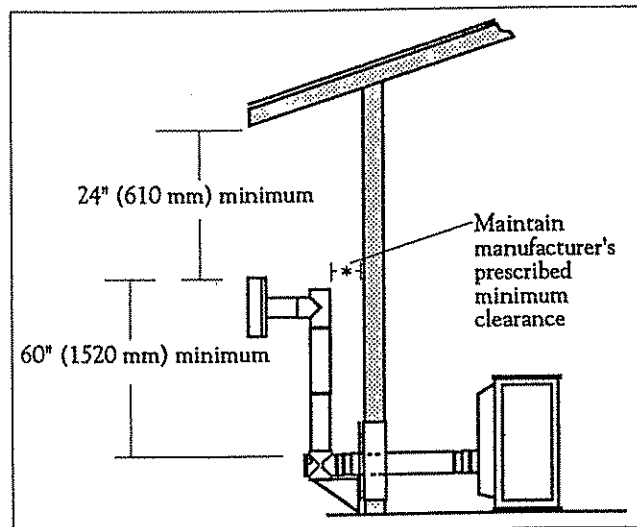
While the horizontal direct vent option is appropriate for some installations, it is not recommended if you live in area where power outages are common and you do not have a backup source of electricity. Because the Reliance exhaust system is powered by an electrical combustion exhaust fan, the normal venting of smoke can be disrupted if the power fails and smoke may enter the home.

If power outages are common in your area, choose one of the direct venting options that follow.

Horizontal Direct Vent with Vertical Rise Ending Below Eave



The horizontal direct-vent installation is not recommended for areas that experience regular power disruption.



A vertical section may be added to pellet vent that is direct-vented to the outside for improved "backup draft," but recommended minimum clearances must be observed.

A vertical rise of at least 5' (1520 mm) above the stove's flue collar will help provide a natural "backup" draft if the electricity is disrupted so that smoke will continue to be evacuated from the stove. The following restrictions apply to such installations:

- As stated above, the vertical rise must extend at least 5' above the flue collar of the stove.
- The listed chimney cap must maintain a clearance of at least 24" (610 mm) from the lowest point of the roof overhang.
- The installed vent cap must observe its manufacturer's recommended clearance to the house, and

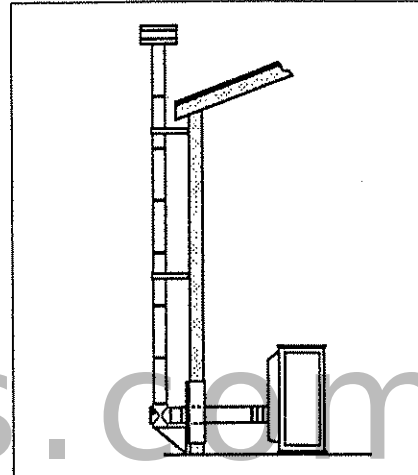
the cap must be designed specifically for such installations (it should not be a cap designed for vertical termination above the roof line).

- A two-way cleanout must be installed at the base of the vertical rise to facilitate cleaning both the vertical and horizontal sections.

If the clearances recommended by the manufacturer of the pellet vent purchased for your installation are different than those stated here, they will supercede the clearances listed here.

Horizontal Direct Vent with Vertical Rise Bypassing Eave and Ending Above Roof Line

If the building's dimensions do not allow any of the clearances outlined in the preceding section, the vertical rise may be extended past the eave to terminate above the roof line with an appropriate vent cap.



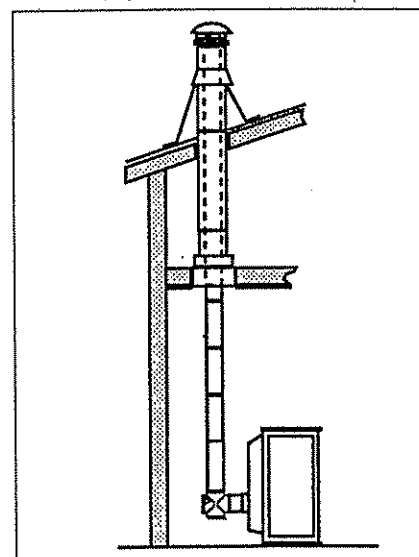
Installations that extend past the eaves must observe minimum clearances to the roof.

This type of installation vents combustion by-products above the living area of the home completely, and as a result is a preferred installation option by some.

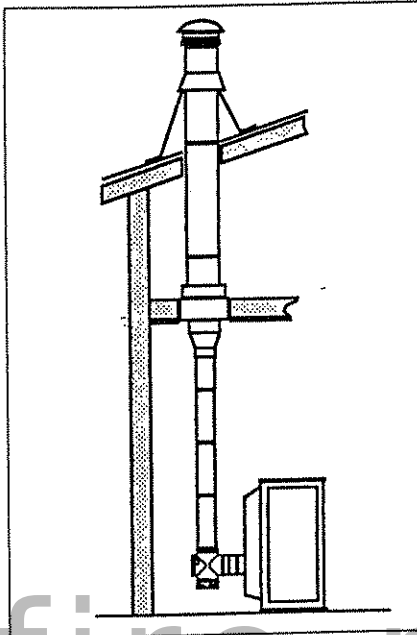
This vertical section must extend at least 3' (900 mm) above the point at which it passes the roof line, and at least 2' (600 mm) higher than any part of the roof within 10' (3 m).

Venting to a Prefabricated Chimney

If your home has an existing prefabricated metal chimney that meets the qualifications stated in the "Venting Requirements" section above, it may be used as part of the system that vents your Reliance.



The most effective way to use an existing metal chimney is to run pellet vent through it.



Venting into a metal chimney with a diameter of 6" (150 mm) or less through the use of a 3"-to-6" (80-150 mm) adaptor is a second, though less satisfactory, way to make use of an existing metal chimney in your Reliance installation.

For best performance, and for metal chimneys larger than 6" (150 mm) in diameter, leave the metal chimney in place but reline it with pellet vent. Then, seal the opening around the pellet vent at the point where it enters the original chimney in a way that satisfies local codes.

A second option that may be used on existing metal chimneys that are 6" (150 mm) diameter or smaller is to run pellet vent up to the chimney, then use a 3"-to-6" (80 mm-150 mm) adaptor.

Check on the availability and compatibility of such adaptors before you buy. Some manufacturers offer adaptors that will make the transition between 3" (80 mm) pellet vent and 6" (150 mm) chimneys only between components of their own brand.

If the pellet vent is a different brand than the chimney and no suitable adaptor is available, a new adaptor can be custom-fabricated. Run a bead of high temperature silicone between the adaptor and the chimney to seal the connection.

Before you pursue this option, however, check with local building officials to be sure that local codes will allow this approach.

Venting to a Masonry Chimney

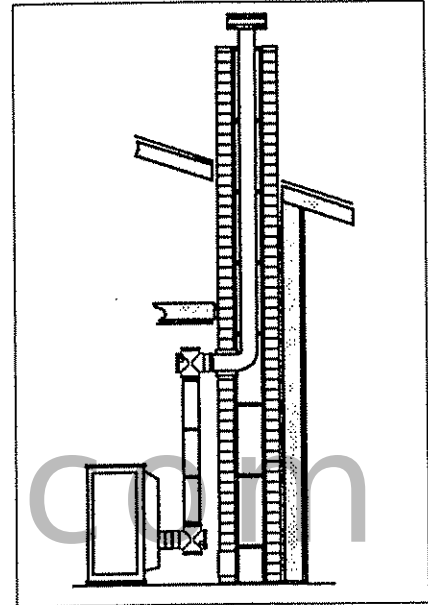
Both freestanding masonry chimneys and fireplace masonry chimneys may be used for installation of your Reliance if either of the two methods are employed. Such chimneys must be lined.

The first — and by far the best — method involves relining the chimney. The second method involves adapting the 3" (80 mm) pellet vent to a 6" (150 mm) thimble, but this approach should only be used with chimneys having a flue size of 6" x 6" (150 mm x 150 mm) or smaller. Larger flue sizes, and particularly those of exterior chimneys, will experience draft reduction and may cause condensation to form. A masonry chimney flue must be relined with a 3" (80 mm) stainless steel liner, or, if the vertical length of the chimney is more than 15 feet (5.3 meters), (or if the altitude is higher than 4,000 feet), a 4" (100 mm) stainless steel liner should be used.

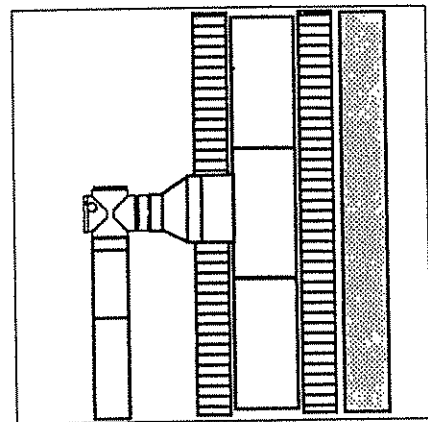
The liner should be properly supported and should extend down the flue to the thimble. An appropriate elbow should be used to direct the liner through the thimble to a point where it can be connected to the pellet vent.

When adapting pellet vent to an existing thimble, use the adaptor supplied by the manufacturer to ensure a proper fit. Run a bead of high temperature silicone between the adaptor and the thimble to seal the connection.

As with the directions given for connecting to a prefabricated metal chimney, check with local building officials first to be sure that local codes will allow this approach.



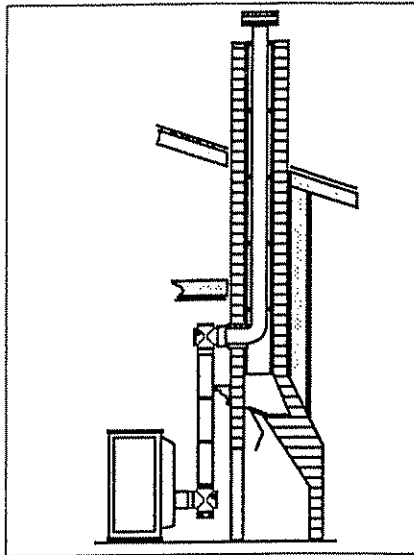
Because of their large size masonry chimneys often affect pellet stove performance adversely. For best results, reline with a 3" (80 mm) stainless steel liner.



You may be able to use a 3"-to-6" (80-150 mm) adaptor to connect the pellet vent to small, interior masonry chimneys.

Above a Fireplace

In this installation type, the pellet vent rises from the stove past the mantel, turns ninety degrees, and approaches the thimble where it connects with either the stainless steel liner or the thimble adaptor (for chimneys having a flue size of 6" x 6" (150 mm x 150 mm) or smaller only) as described in the preceding section.

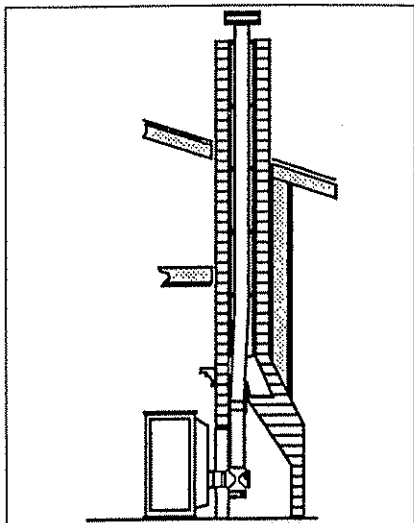


An installation in which the Reliance is connected to a thimble above the mantle should follow the same guidelines as those for a freestanding masonry; in addition, seal the damper to prevent room air from escaping.

Follow the same guidelines mentioned above for installing pellet vent into a freestanding masonry chimney, and pay special attention to one additional point: The fireplace damper must be closed and sealed to prevent room air from being drawn up the flue, reducing the draft. However, it must be possible to re-open the damper to inspect or clean the chimney.

Through a Fireplace

For best results, reline the chimney with stainless steel liner according to the directions given previously for masonry chimneys. This greatly reduces the possibility of condensation forming within the larger masonry flue, especially if the chimney is an exterior one. Cleaning is much easier also with a total reline.



Use a stainless steel liner when venting through a masonry fireplace,

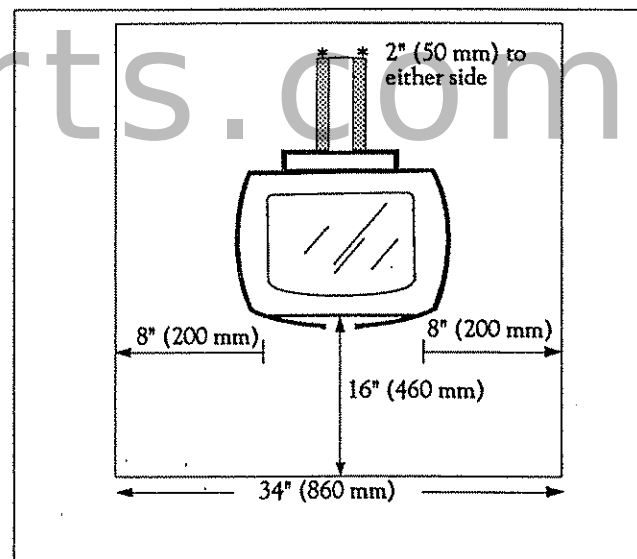
The damper plate should be removed or fixed in the open position, and the resulting space around the stainless steel lining should be blocked off with a sheet metal plate and sealed with silicone to prevent room air from rising up the flue.

Selecting the Best Installation for Your Needs

Consult your dealer for assistance in choosing the best installation for your home. Because chimney components and their recommended clearances can vary between manufacturers of pellet vent, and because local building codes may vary throughout the country, your local Vermont Castings Authorized Dealer is a valuable resource.

Minimum Floor Protection

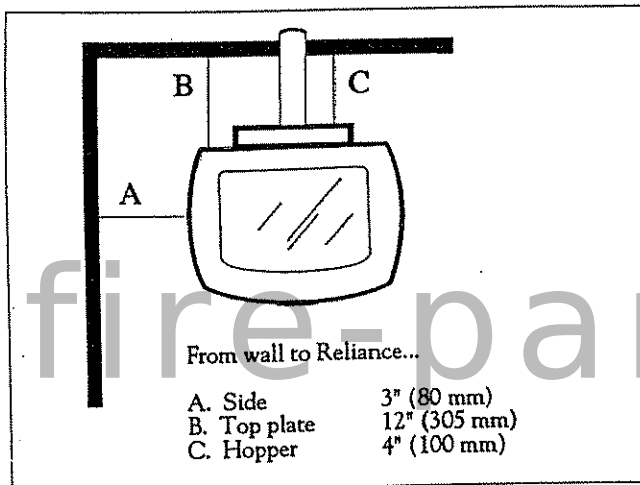
Install the Reliance on any non-combustible material of any thickness and K factor, or use a UL listed floor protector. The floor protector must extend 16" (410 mm) from the front load door, and 8" (200 mm) from the right and left sides of the load door. This latter requirement results in a floor protector width of 34" (860 mm). The protector also must extend under the pellet vent connector for its horizontal length and 2" to either side.



Keep the Stove a Safe Distance from Surrounding Materials

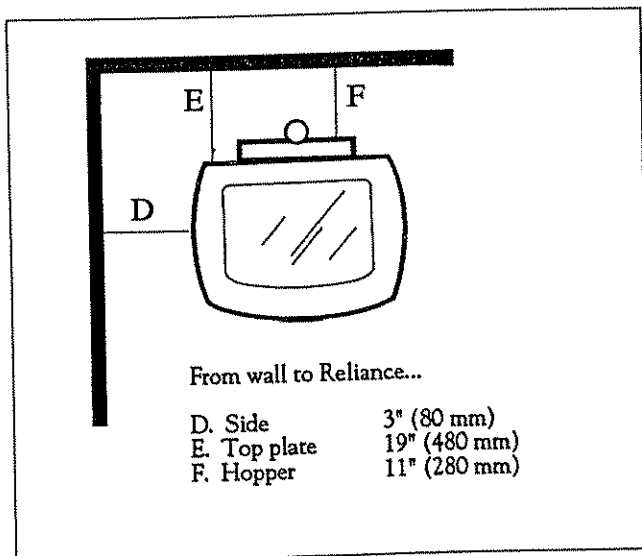
The Reliance radiates heat in all directions when operating. A safe installation requires that adequate *clearance* be maintained between the stove and nearby combustible materials to ensure that such materials do not overheat. The diagrams below illustrate the minimum clearances for the Reliance in some typical installations.

Parallel Installation, Vent Through Back Wall



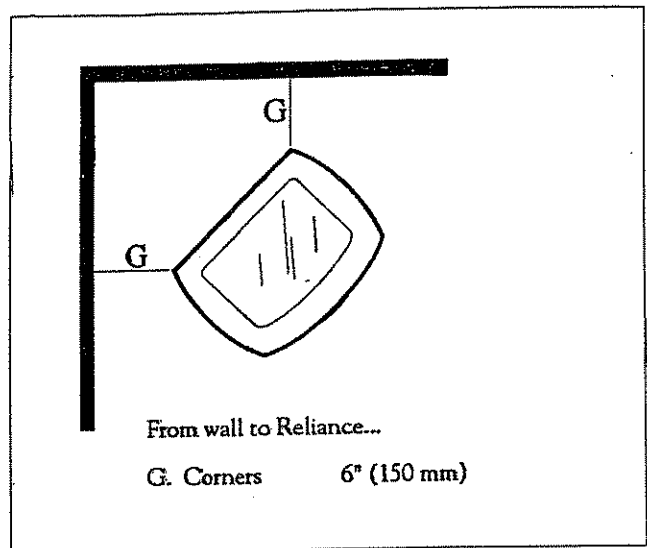
Note that the top plate is not the nearest part of the stove to the wall even when its clearance is observed.

Parallel Installation, Vent Through Ceiling

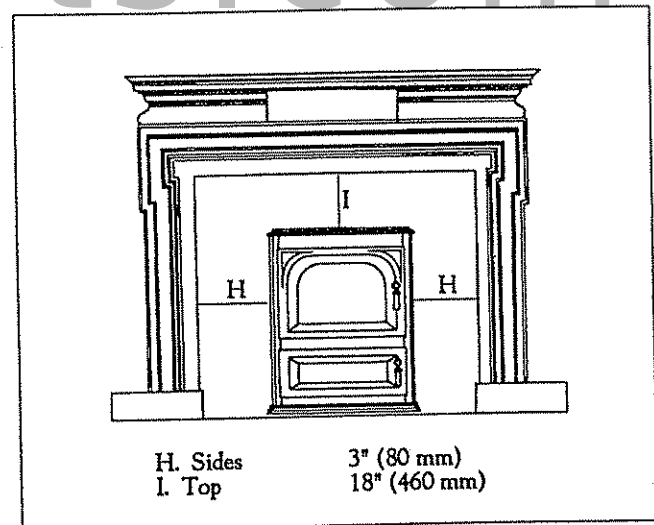


Note that the top plate clearance must take into account the amount of space taken up by the back panel-shroud as well as the pellet vent connector and/or elbows behind the stove.

Corner Installation



Fireplace Installation



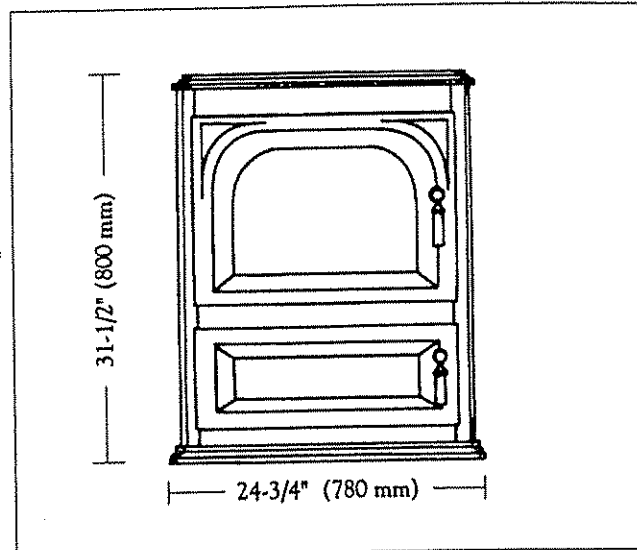
Specifications

Fuel size/type	Wood/cardboard pellets*
Maximum pellet capacity	48 lbs. (21.7 kg.)
Maximum burn time	30 hours
Range of heat output	8,000-40,000 Btu's/hr.
Maximum heat output	40,000 Btu's/hr.**
Area heated	1,600 ft ² (148 m ²)
EPA Emissions rate	EPA Exempt***
Efficiency rating	80.0%
Loading	Top
Exhaust vent	3" (75 mm)
Exhaust vent position	Rear
Ash handling system	Removable ash pan
Front glass panel	High-temperature ceramic
Top glass panel	Tempered glass
Weight	375 lbs. (171 kg.)
Width	24-3/4" (780 mm)
Depth	19-1/4" (488 mm)
Height	31-1/2" (800 mm)

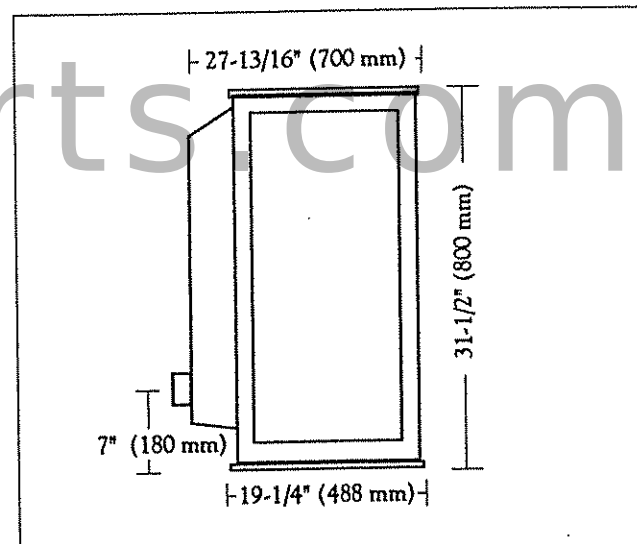
*As specified by the A.P.F.I. and F.F.I.

**Maximum heat output based on laboratory testing using full loads of wood pellets

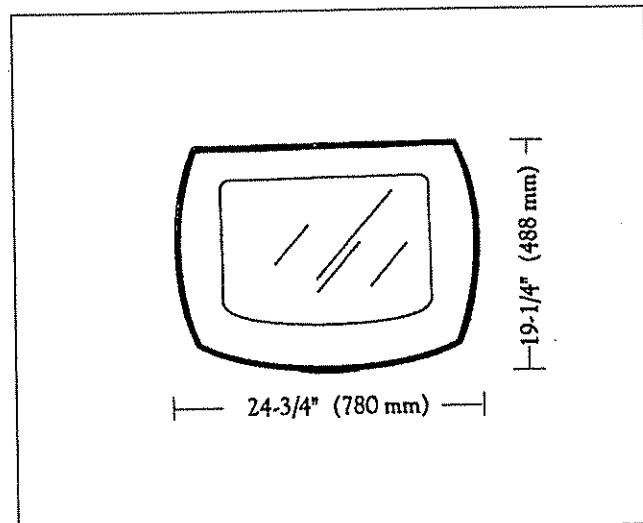
***Method 28A



Front elevation

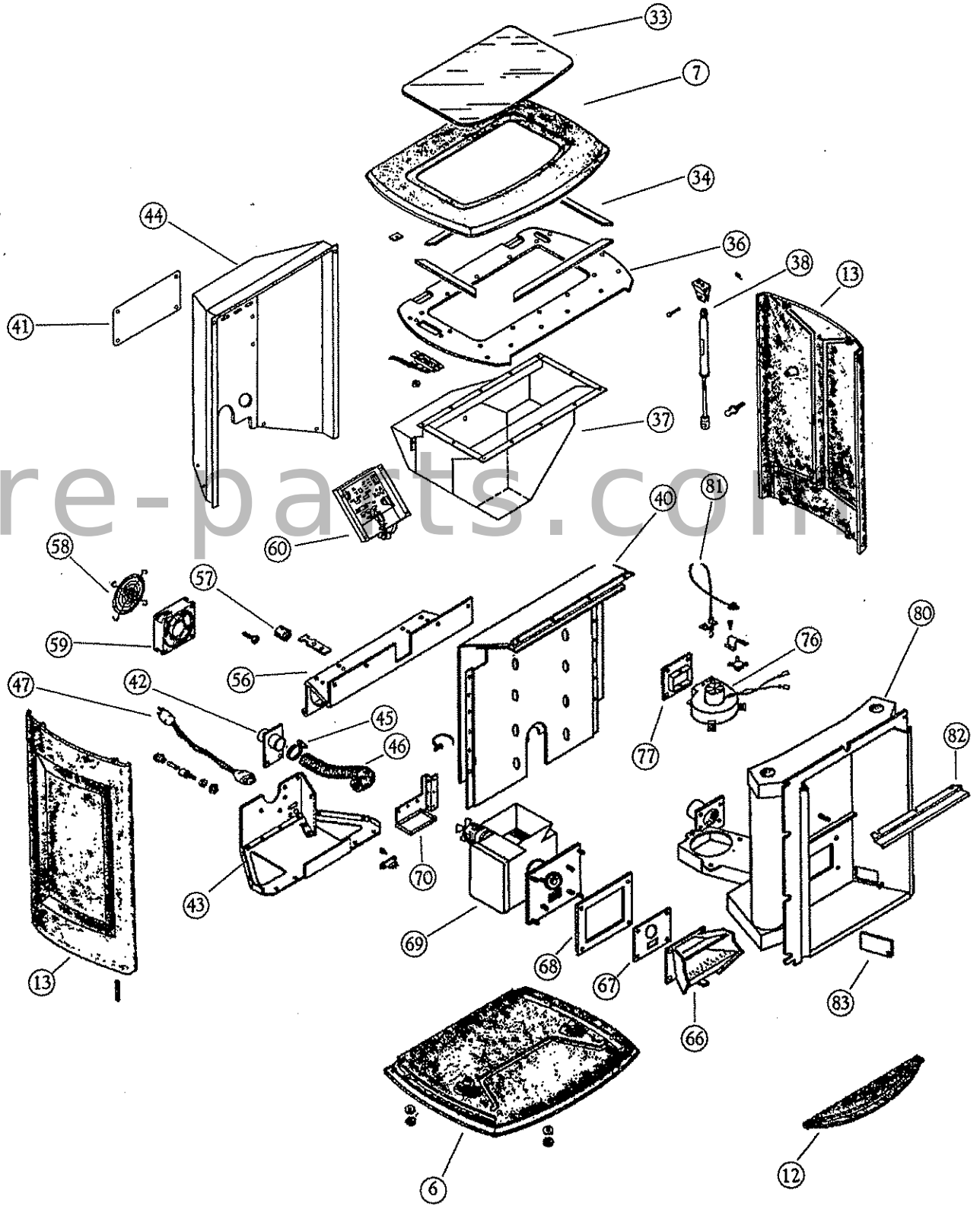


Side elevation



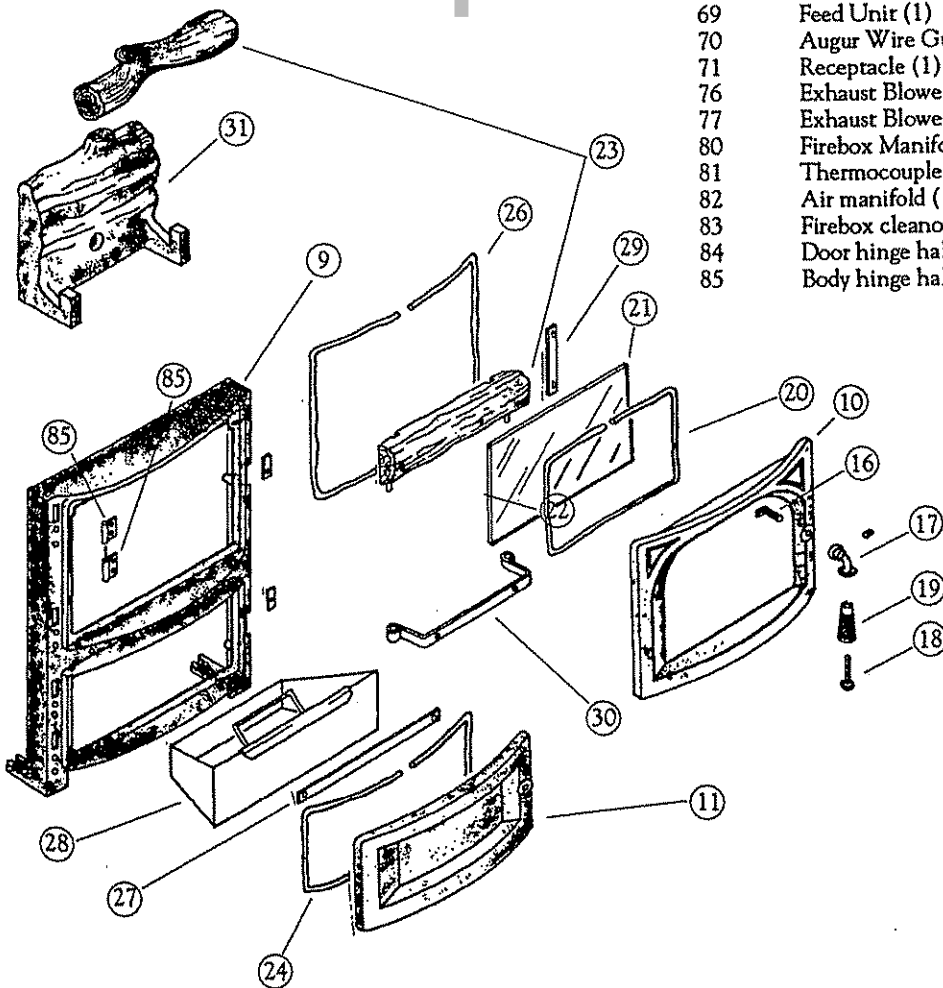
Top view

18 Exploded View



Reliance Parts List

#	Description	Part #	#	Description	Part #
6	Bottom (1)	130-0006	31	Fixed Back Log (1)	160-0007
7	Top (1)	130-0007	33	Glass Griddle (1)	160-0001
9	Front Frame (1)	130-0009	34	Silicone Gasket	120-3532
10	Front Door (1)	130-0010	36	Inner Top (1)	160-0004
11	Ash Door (1)	130-0011	37	Hopper (1)	140-0525
12	Ashlip (1)	130-0012	38	Gas spring (1)	120-1848
13	Left/Right Sides (2)	130-0013	40	Access Wall (1)	140-0520
16	Door shaft (1)	160-0625	41	UL/ULC Label (1)	160-0015
17	Handle stub (1)	160-0664	42	Air Supply Flange (1)	140-0519
18	Pan head screw, 1/4-20 x 3" (1)	120-1310	43	Bottom Shield (1)	140-0521
19	Handle (1)	500-4238	44	Access wall (1)	140-0520
20	3/16" Fiberglass Gasket for Door Glass (5')	120-3556	45	Hose/clamp (1)	120-3395
21	Door Glass (1)	160-0002	46	Air inlet tube (1)	160-0019
22	Log Holder (1)	140-0522	47	Electric cord (1)	120-4816
23	Top and Front Log Set (1)	500-0007	54	Upper Convection Wall Assembly (1)	500-0008
	Front Log (1)	160-0008	55	Lower Convection Wall (1)	140-0523
	Center Log (1)	160-0009	56	Convection Fan Hanger (4)	140-0515
24	3/8" Fiberglass Ash Door Gasket (4.25')	120-3589	57	Silicone Suspension Tube (4)	160-1245
26	3/8" Fiberglass Front Door Gasket (5.75')	120-3589	58	Convection Fan (2)	160-0024
27	Ash Pan Support (1)	160-0003	59	Finger Guard (2)	140-0509
28	Ashpan (1)	140-0527	60	Control panel (1)	500-0003
29	Glass clip (2)	700-1012	66	Burn Pot (1)	160-0006
30	Log holder (1)	140-0522	67	Inner Feed Gasket (1)	120-3530
			68	Outer Feed Gasket (1)	120-3531
			69	Feed Unit (1)	160-0005
			70	Augur Wire Guide	140-0514
			71	Receptacle (1)	120-4970
			76	Exhaust Blower (1)	160-0010
			77	Exhaust Blower Adaptor (1)	140-0507
			80	Firebox Manifold Assembly	500-0001
			81	Thermocouple assembly (1)	500-0005
			82	Air manifold (1)	140-0526
			83	Firebox cleanout cover (2)	140-0513
			84	Door hinge half (4)	160-4280
			85	Body hinge half (4)	160-4281



Troubleshooting the Reliance

Symptoms	Probable Cause	Solution
Stove runs at a high level regardless of dial or stroke setting; can't turn fire down to low flame; burn rate fluctuates — from fast flame, to slow "stringy" flame, back to fast flame; erratic fan behavior.	Thermocouple failure.	Replace thermocouple.
Difficult to start.	Pusher block adjustment too high.	Adjust pusher block to lower position.
Low heat output. Irregular heat output.	<ol style="list-style-type: none"> 1. Insufficient feed rate. 2. Insufficient draft. 3. Combustion fan needs cleaning. 4. Heat exchange passages need cleaning. 5. Poor quality fuel (High percent of "fines." Fines are pellet dust, a powder-like residue). 	<ol style="list-style-type: none"> 1. Adjust feed rate. 2. Check for air leaks. De-ash and de-carbon burn pot; de-ash logs; do not let ash or pellets build up behind front log. 3. Clean fan. 4. Clean passages with brushes. 5. Try burning different fuel brand to see if problem goes away.
Pellets bridge at mouth of feeder.	Pellets exceed one inch in length; pellets more than an inch long can bridge at feeder mouth.	Only use pellets shorter than 1 inch.
Loud "clunk" noise.	Pusher block binding or not fully returning after stroke/bearing needs oil.	Disassemble pusher block and clean/oil bearing (Ask dealer for details).
Fire goes out.	<ol style="list-style-type: none"> 1. Fuel used up. 2. Power failure. 3. Pellet flow is obstructed in hopper. 4. Failure of feed motor or draft motor because of failed thermocouple. 5. Auger is clogged by wet pellets, foreign matter, etc. 	<ol style="list-style-type: none"> 1. Refuel/restart fire. 2. No solution; the unit must have power to operate. 3. Unplug electricity first; then dig out foreign matter causing the obstruction. 4. Replace thermocouple. (Note: If thermocouple is open, feed motor will stop and the other motors will come on high) 5. Unplug unit; turn fan blades on back of motor to manually back out auger, then plug in and test operation under power. Use dry pellets.
Pellets do not burn completely; pellets in ash pan incompletely burned.	<ol style="list-style-type: none"> 1. Bad thermocouple. 2. Feed rate too high. 3. Burn pot needs de-ashing. 4. Burn pot needs to be de-carboned. 5. Inadequate draft. 6. Restricted heat exchanger 	<ol style="list-style-type: none"> 1. Replace thermocouple. 2. Adjust feed rate. 3. Prevent ash/pellet build-up behind front log. 4. De-carbon the burn pot. 5. Check draft. 6. Clean unit
Auger won't work. Either fan won't work. Distribution fans won't work.	<ol style="list-style-type: none"> 1. Circuit board failure. 2. Motor failure. 3. Control board switch mis-set to T-Stat without necessary hookup. 	<ol style="list-style-type: none"> 1. Replace board. 2. Check for voltage at respective terminals. 3. Change setting to "Stove".

Symptoms	Probable Cause	Solution
Auger won't work (Open thermocouple).	Thermocouple failure.	Replace thermocouple.
Dirty glass. Note: Some deposits will occur on the glass of all units during normal operation; they should clean off when wiped with a dry cloth. Deposits will form more readily when unit is run at a higher rate. More stubborn dirt can be removed with Bon Ami or Soft Scrub.	1. Bad thermocouple. 2. Pellets with "fines" (Fines are pellet dust, a powder-like residue).	1. Replace thermocouple. 2. Try burning different fuel.
No flame path through logs. Dirty glass (Deposits do not wipe off). Flames under front log and hitting glass, or around ends of logs, or up sides of the firebox.	Flame path through logs blocked.	De-ash and de-carbon the burn pot; de-ash and de-carbon logs; do not allow ash or pellets to build up behind front log.
Internal noises/squeeks.	Pusher block bearing race needs lubricating.	Remove feeder cover plate and, with the block all the way forward, lubricate the bearing race (the surface that the pusher block slides on) with high-temperature powdered graphite lubricant.
Handle of front door not plumb.	Stud ground wrong.	Replace stud.
Excessively frequent cycling of combustion fan (For example, every 5-10 seconds). Combustion fan hardly cycles at all.	1. Adjustment differential between High and Low of combustion fan is too great. 2. Adjustment differential between High and Low of combustion fan is too small.	1. Contact dealer for board adjustment procedure. 2. Contact dealer for board adjustment procedure.
Visible smoke from the flue; carbon build-up on logs; poor de-ashing; flames from auger tube on "low," auger visible.	Possible air leaks through auger tube.	Contact dealer for leak repair instructions.

Appendix A

Mounting the Reliance Wall Thermostat

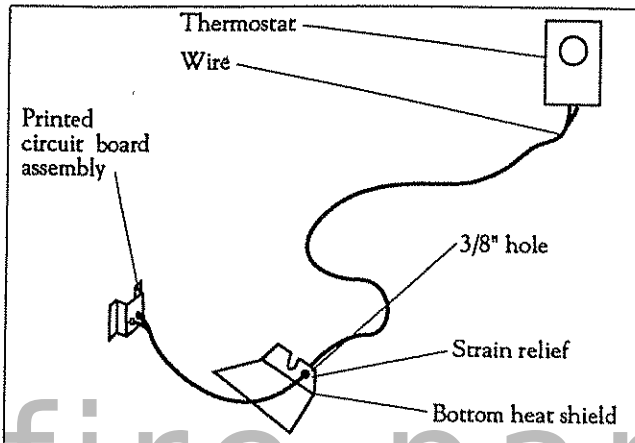
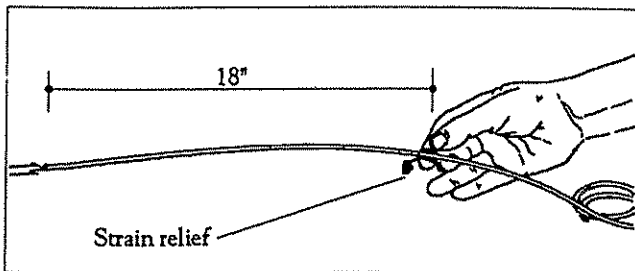
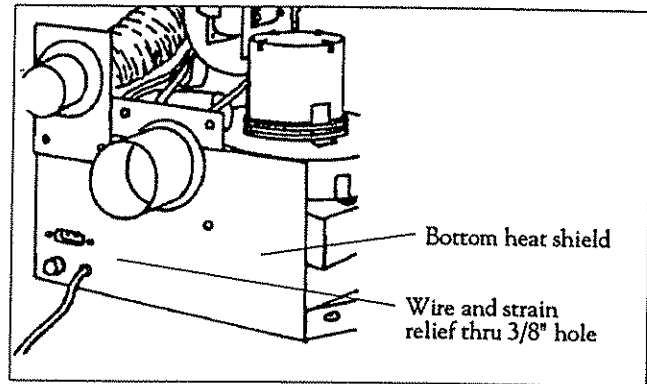


Diagram of the connection of the wall thermostat to the printed circuit board assembly through the sheet metal bottom heat shield.

1. Choose a location for the thermostat. Refer to the section "Selecting Location" in the instructions packaged with the thermostat for factors to consider.
2. Using thermostat wire of from 18 to 22 gauge that you have procured locally, route the wire from the thermostat to the back of the stove. Refer to the directions supplied with the thermostat for a suggested procedure to route the wire.
3. Mount the thermostat on the wall and connect the wire to it according to the manufacturer's instructions.
4. Remove the six screws that hold the sheet metal back panel of the Reliance in place and remove the panel.
5. A black plastic strain relief is provided to protect the thermostat wire as it is routed to the printed circuit board assembly; clamp it on to the thermostat wire 18" from the end, oriented with the smaller circumference facing the end of the wire nearest the stove.

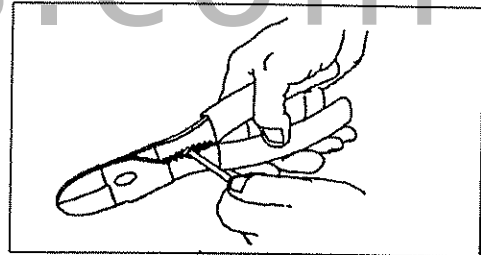


6. Locate the 3/8" hole next to the fuse in which the strain relief will be placed. Thread the end of the wire

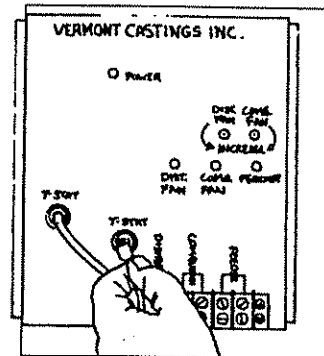


through the hole and plug the strain relief into the hole securely.

7. Attach the two spade connectors to the ends of the wire.



8. Plug the two connectors into the two receptacles in the back of printed circuit board assembly labeled "T-Stat." Make sure the wire is routed well away from fans and hot exhaust passages.

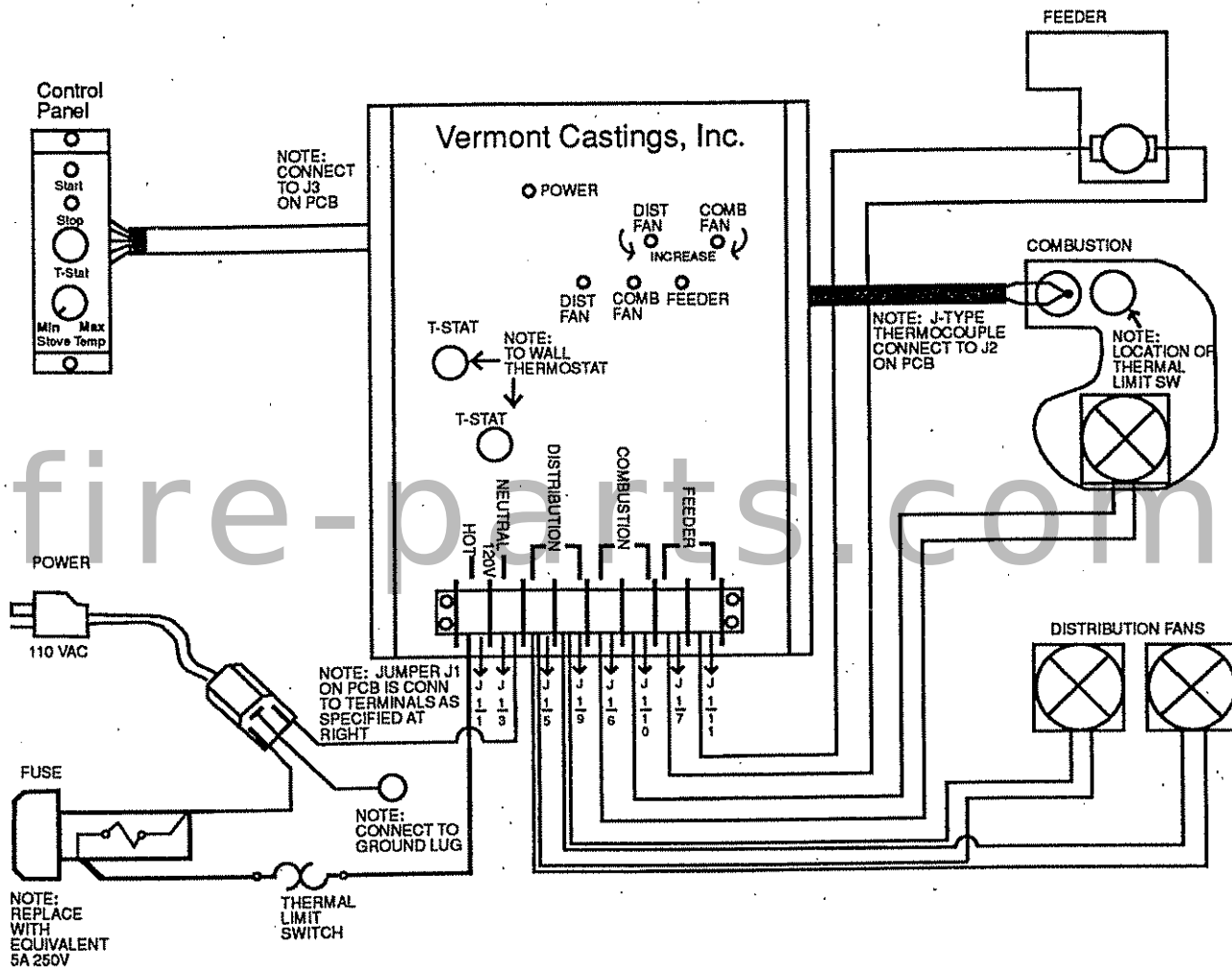


9. Re-install the back panel and secure it with the six screws that were removed previously.

10. Set the "T'Stat/Stove" selection switch on the control panel to "T'Stat." Turn the "Stove Temp" dial on the control panel to "Min."

NOTE: The instructions packed with the thermostat have a section entitled "Heating Anticipation" that describes a thermostat adjustment procedure. It is not necessary to adjust the thermostat for use with the Reliance and this section may be disregarded.

Electrical Diagram



Vermont Castings Warranty

Limited Three Year Warranty

Vermont Castings warrants that this Reliance will be free of defects in material and workmanship for a period of three years from the date you receive it, except that the ceramic logs, motor, exhaust fan, blowers, control panel, circuit board, loading door strut, feed mechanism, handles, glass door panels, cement, and gasketing shall be warranted as described below.

Vermont Castings, Inc. will repair or replace, at its option, any part found to be defective upon inspection by a Vermont Castings' Authorized Dealer. The customer must pay for any Authorized Dealer in-home travel fees, service charges, or transportation costs for returning the fireplace to the Authorized Dealer. If upon inspection the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer for parts and/or labor.

Any Reliance or part thereof that is repaired or replaced during the limited warranty period will be warranted under the terms of the limited warranty for a period not to exceed the remaining term of the original limited warranty or six (6) months, whichever is longer.

Limited One Year Warranty

The following parts of the Reliance are warranted to be free of defects in material and workmanship for a period of one year from the date you receive it: the printed circuit board, the ceramic logs, the motor, the exhaust fan, the blowers, the control panel, the loading door strut, the feed mechanism, the handles, the glass door panels, the cement, and the gasketing. Any of these items found to be defective will be repaired or replaced at no charge, upon the return of said part to a Vermont Castings' Authorized Dealer with postage prepaid.

Exclusions and Limitations

1. This warranty is transferable; however, proof of original purchase if required.
2. This warranty does not cover misuse of the Reliance. Misuse includes any practices, procedures, or use that is not in accordance with the guidelines in the Owner's Manual concerning installation, operation, and maintenance of the Reliance.

3. Vermont Castings offers no warranty on chipping of enamel surfaces. Inspect your Reliance prior to accepting it for any damage to the enamel.

4. This warranty does not cover a Reliance that has been modified unless authorized in writing by a Vermont Castings' representative. This warranty does not cover damage to the fireplace caused from a salt environment or any fuel not recommended in the Owner's Guide.

5. This warranty does not cover a stove repaired by someone other than a Vermont Castings' Authorized Dealer.

6. Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the Vermont Castings' Authorized Dealer from whom you purchased your Reliance. (Do not operate the Reliance as this may negate the ability to process the claim with the carrier.)

7. Claims are not valid where the installation does not conform to local building and fire codes or, in their absence, to the recommendations in the Owner's Guide.

How To Obtain Service

If a defect is noted within the warranty period, the customer should contact a Vermont Castings' Authorized Dealer with the following information:

1. Name, address, and telephone number of the purchaser.
2. Date of purchase.
3. Serial number from the label on the back of the stove.
4. Nature of the defect or damage.
5. Any relevant information or circumstances, ie., installation, mode of operation when defect was noted.

A warranty claim will then start in process. Vermont Castings reserves the right to withhold final approval of a warranty claim pending a visual inspection of the defect by authorized representatives.

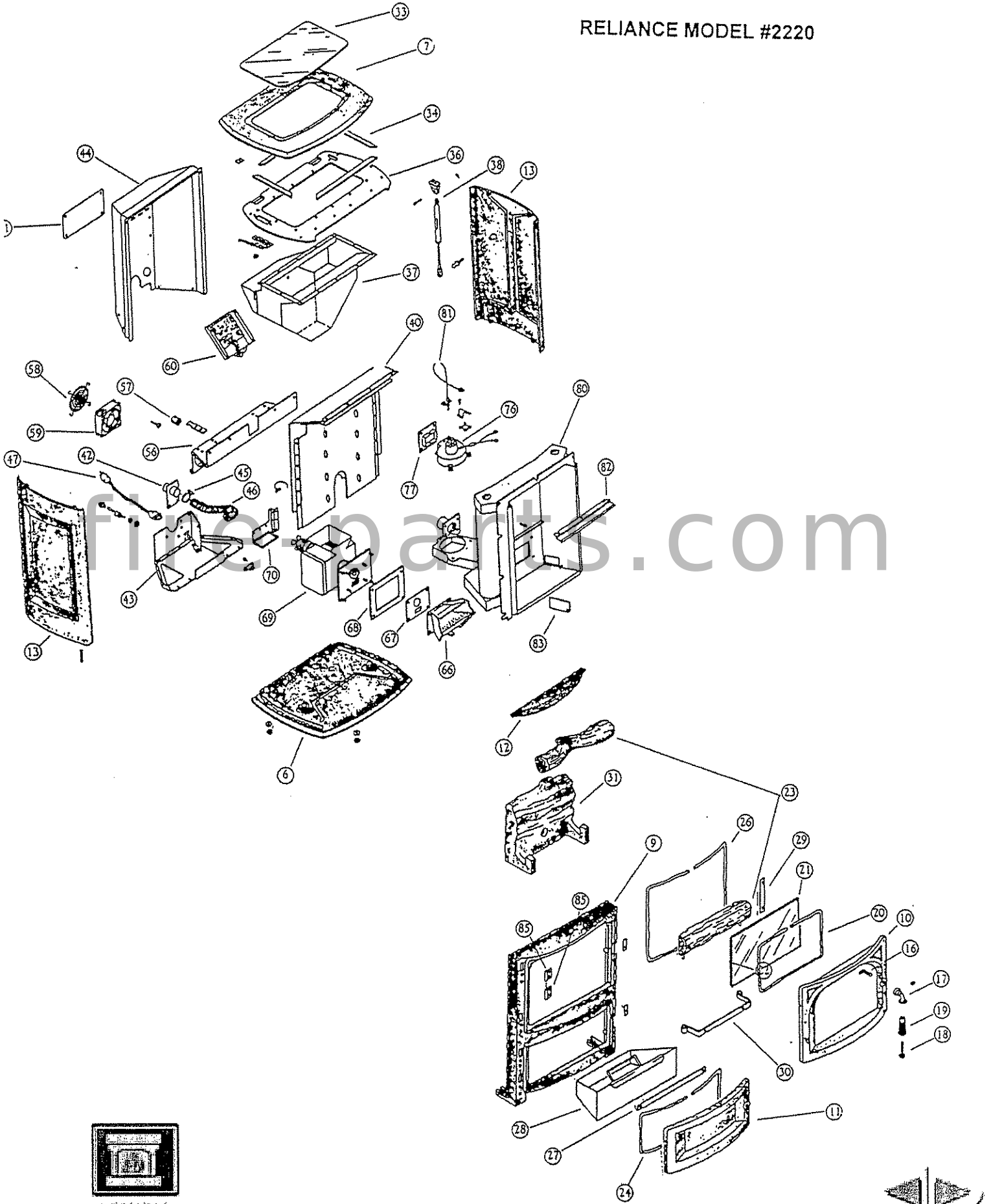


Vermont Castings, Inc.
Prince Street
Randolph, Vermont 05060
U.S.A.

Vermont Castings, Inc.
Unit 9, Prime Industrial Park
Shaftesbury Street
Derby
Derbyshire DE3 8YB
England

#200-0511E

RELIANCE MODEL #2220



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RELIANCE

MODEL #'S 2220,2221, 2222,

FEATURES: MANUFACTURED AUGUST 1991 THROUGH DECEMBER 1992

<u>DIAGRAM #</u>	<u>ITEM #</u>	<u>PART DESCRIPTION</u>	<u>SUGGESTED RETAIL</u>	<u>DEALER COST</u>
6	130-0006	BOTTOM		
7	130-0007	TOP(MUST BE ORDERED ASSEMBLED)		
		<i>INCLUDE: 160-0001 GLASS</i>		
		<i>120-3534 SPONGE GASKET</i>		
9	130-0009	FRONT		
10	130-0010	FRONT DOOR		
11	130-0011	ASH DOOR		
12	130-0012	ASH LIP		
13	130-0013	SIDE		
16	160-0625	DOOR HANDLE SHAFT & DOOR CATCH		
	120-0563	5/16- 18 X 5/16 SOC SS		
17	160-0610	HANDLE STUB		
19	500-4238	FRONT DOOR HANDLE ASSEMBLY		
20	120-3556	3/16" FIBERGLASS GASKET		
21	160-0002	FRONT DOOR GLASS		
23	000-0013	NEW LOG SET		
		<i>OLD LOGS NOT AVAILABLE MUST ORDER NEW SET.</i>		
24	120-3589	3/8" FIBERGLASS GASKET		
26	120-3589	3/8" FIBERGLASS GASKET		
27	160-0003	ASH PAN SUPPORT		
28	140-0527	ASH PAN		
29	700-1012	GLASS RETAINER		
30	140-0522	LOG RETAINER		
31	160-0030	BACK LOG ONLY		
33	160-0001	GRIDDLE GLASS(MUST BE ORDERED ASSEM)		
		<i>INCLUDE: 130-0007 TOP</i>		
34		<i>120-3534 SPONGE GASKET</i>		
	160-0018	GRIDDLE HINGE		
36	160-0004	INNER TOP		
37	140-0525	HOPPER		
38	120-1848	GAS SPRING		
42	140-0519	AIR SUPPLY FLNANGE		
43	140-0521	BOTTOM SHIELD		
44	140-0520	BACK SHEET METAL COVER		
45	120-3395	2 1/2" HOSE CLAMP		
46	160-0019	AIR INLET TUBE		
	140-0520	AIR SUPPLY CONNECTOR FLANGE		
	120-4816	ELECTRICAL CORD		
	500-0018	UPPER CONVECTION WALL ASSEMBLY		



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- | | | | |
|----|----------|---------------------------------------|---------------|
| 55 | 140-0523 | LOWER CONVECTION WALL | |
| 56 | 140-0515 | FAN HANGER | |
| 58 | 160-0014 | CONVECTION FAN OLD | |
| | 160-0024 | CONVECTION FAN NEW | |
| 58 | 500-0010 | CONVECTION CORD SET | |
| 59 | 140-0509 | FAN GUARD | |
| 60 | 500-0003 | CONTROL PANEL (BUTTONS IN THE INNER T | |
| 66 | 160-0006 | PELLET BURN POT | |
| 66 | 160-0039 | AUGER MOTOR | |
| | 160-0044 | AUGER | |
| | 120-1849 | AUGER SPRING | |
| | 160-0047 | AUGER BEARING | |
| | 160-0048 | PUSHER BLOCK | |
| | 160-0049 | YOKE RETROFIT | |
| | 160-0057 | PUSHER BLOCK ACCESS DOOR | |
| | 160-0055 | BEARING AGITATOR SHAFT | |
| | 160-0056 | SHAFT AGITATOR | |
| 67 | 120-3530 | INNER BURN POT GASKET | |
| 68 | 120-3530 | OUTER BURN POT GASKET | |
| 69 | 160-0005 | FEED UNIT | |
| | 500-0009 | FEED MTR LEAD EXT. ASSEMBLY | |
| | 160-0026 | LIMITING ROD | |
| 70 | 140-0514 | AUGER WIRE GUIDE | |
| 71 | 120-4970 | CORD RECEPTACLE | |
| 76 | 160-0010 | EXHAUST FAN | |
| | 140-0508 | EXHAUST EXIT BRACKET | |
| 77 | 140-0507 | EXHAUST FAN ADAPTOR | |
| 80 | 500-0001 | FIREBOX MANIFOLD ASSEMBLY | NOT AVAILABLE |
| 81 | 500-0005 | THERMOCOUPLE ASSEMBLY | |
| 82 | 140-0526 | AIR MANIFOLD | |
| 83 | 140-0513 | FIREBOX CLEAN OUT COVER | |
| 84 | 160-4280 | FRONT DOOR HINGE-DOOR | |
| 85 | 160-4281 | FRONT DOOR HINGE-BODY | |
| 86 | 500-0002 | P.C. BOARD ASSEMBLY | |
| 87 | 120-4241 | BALL STUD | |
| 88 | 160-0011 | FUSE HOLDER | |
| | 120-4913 | FUSE(BUSS #ACC5 5AMP) | |
| | 160-0012 | SNAPSTAT | |
| | 140-0518 | SNAPSTAT COVER | |
| 89 | 160-0017 | 3/16" CLEVIS PIN | |
| 90 | 120-4030 | #21 HAIR SPRING COTTER PIN | |
| 91 | 140-0517 | SPRING ANCHOR | |
| 92 | 140-0516 | FRONT DOOR STRIKER PLATE | |

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ITEMS NOT SHOWN

- 120-1745 LEVELER BOLTS 1/2- 20 X 1
- 000-5811 STOVE BAG
- 200-0511 MANUAL
- 120-4816 POWER CORD
- 160-0664 WOOD HANDLE



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TO MENU



120-1310 HANDLE SCREW
500-0012 THERMOSTAT
160-0025 SCRAPER

ENAMEL CAST PARTS

PREFIXES FOR ENAMEL PARTS

131- RED
132- SAND

*-0007 TOP(MUST BE ORDERED ASSEMBLED)
INCLUDE: 160-0001 GLASS
120-3534 SPONGE GASKET
*-0006 BOTTOM
*-0008 SIDE
*-0012 ASHLIP
*-0011 ASHDOOR
*-0010 FRONT DOOR

HARDWARE

120-0894 1/4-20 X 1/2 PH RD HD
(INNER TOP TO SIDES, LOWER CONVECTION WALL TO
THE BOTTOM & BOTTOM SHIELD)

120-1704 10 X 16 X 1/2 HEX HD WASHER
(THERMOCOUPLE TO EXHAUST FAN)

120-0985 10-24 X 3/8 PH PAN HD
(CONTROL PANEL ASSEMBLY, HOPPER TO INNER TOP)

120-0991 10-24 X 3/4 PH PAN HEAD
(PC BOARD TO HOPPER)

120-4214 1/2-20 X 1 1/2 FUL THD CRS STUD
(BOTTOM TO LEFT & RIGHT SIDE ASSEMBLIES)

120-0482 1/4-20 X 1/2 SOC FL HD CS
(ASH PAN SUPPORT)

120-1338 1/4-20 X 1/2 HEX HD CAP SCREW
(FIREBOX TO FRONT FRAME, HINGE PLATES,
DOOR HINGES, STRIKER PLATES)

120-1242 6-32 X 2 SL RD HD
(FAN GUARD)



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- 120-1374 1/4-20 X 3/4 HEX HD CAP SCREW
(AIR MANIFOLD, ASH LIP, EXHAUST FAN)
- 120-1376 1/4-20 X 1 HEX HD CAP SCREW
(FIREBOX FRONT FRAME TO BOTTOM)
- 120-1404 1/4-20 X 2 3/4 FUL THD HEX HD CS
(LEVELLER BOLT FOR FIREBOX, FRONT FRAME,
EXHAUST FAN)
- 120-3210 1/4-20 PLAIN NUT
(EXHAUST FAN, AIR MANIFOLD, BOTTOM
TO LEFT & RIGHT SIDE ASSEMBLIES)
- 120-3211 1/4-20 PLN HEX TOP LOCK NUT
(CLEAN OUT COVERS)
- 120-3251 10-24 HEX NUT
(PC BOARD TO HOPPER,
HOPPER TO INNER TOP)
- 120-3272 6-32 HEX NUT
(FAN GUARD)
- 120-0989 #8 X 1/4 PH PAN HD SMS
(GROUND LEAD)
- 120-2058 #10 X 1/2 PH PAN HD SMS
(HOPPER TO INNER TOP, INNER TOP TO UPPER
CONVECTION WALL, FAN HANGERS, UPPER TO LOWER CONVECTION
WALL, SNAPSTAT COVER, ACCESS WALL, AUGER WIRE GUIDE)
- 120-2088 #10 X 1 PH PAN HD SMS
(LOWER & UPPER CONVECTION WALLS TO FIREBOX)
- 120-2461 1/4 STAR WASHER
(EXHAUST FAN GROUND)
- 120-2466 #8 PLAIN STAR WASHER
(GROUND LEAD)
- 120-2470 1/4 PLAIN FLAT WASHER
(FIREBOX/ FRONT FRAME & BOTTOM, BOTTOM TO SIDES)
- 120-2473 1/4-.266i X .629o .064t WASHER
(DOOR HINGES, ASH LIP)
- 120-2474 1/4-.313i X .742o X .06t
(FIREBOX TO FRONT FRAME, AIR MANIFOLD)
- 120-0993 1/4-20 X 3/8 PH PAN HD
(SPRING ANCHOR)

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- 120-0996 10-24 X 1/4 PH TRS HD
(GLASS CLIPS)
- 120-1338 1/4-20 X 1/2 HEX HD CS
(LOG HOLDER)
- 120-3212 1/4-20 - #304 SS HEX NUT
(BACK LOG)
- 120-2472 1/4-#304 SS FLAT WASHER
(BACK LOG)

GASKETS

- 120-3589 3/8 LOW DENSITY FIBERGLASS
5.60' FRONT DOOR
4.17' ASHDOOR
- 120-3556 3/16 FIBERGLASS GASKET
5' FRONT DOOR GLASS AREA
- 120-3532 SILICON GASKET
5' GRIDDLE GLASS
- 120-3531 FEED UNIT GASKET
WHERE FEED UNIT MEETS THE BACK
OF THE FIRE CHAMBER
- 120-3530 INNER BURN POT GASKET
SEE DRAWING ON PAGE 16
- 120-3531 OUTER BURN POT GASKET
SEE DRAWING ON PAGE 17



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