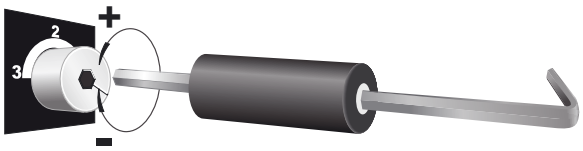
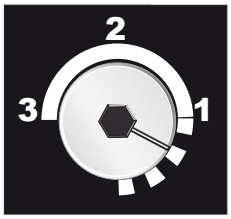
Explaination of the Air Intake Controls

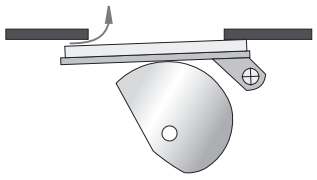
The Burn Rate Control Knob

The burn rate is controlled simply by rotating the control knob with the tool provided.



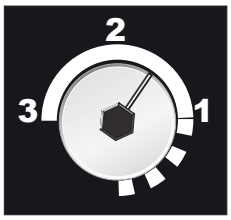
As the knob is rotated counterclockwise, the cam progressively opens the air shutter to allow an increasing amount of air into the stove.

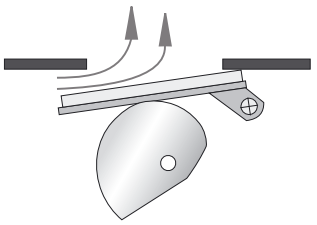




Low Opearation

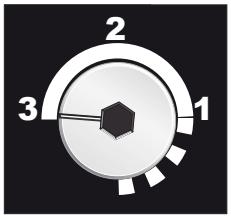
Because the air entering the stove is not only dependent upon the position of the flap but also the performance and temperature of the chimney, the setting of the control knob for a particular fire size will vary.

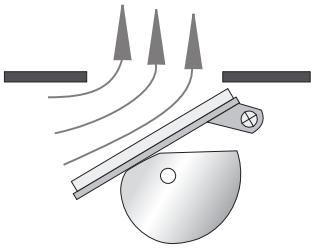




Normal Opearation

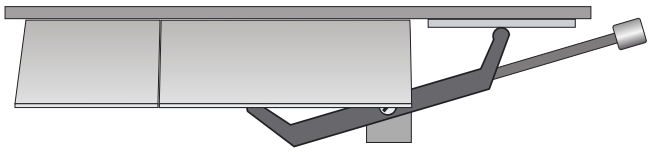
Generally speaking, any setting beyond “2” will normally only be used when lighting the fire.





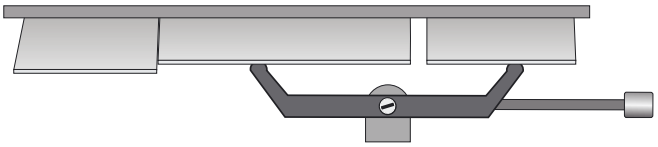
Lighting

The Burn Type Selection Lever



Post-combustion and airwash shutters open, providing top air for optimal wood burning. Under-grate air flap closed.

Position A for normal operation



All air shutters open, providing maximum air intake above and below grate for ignition.

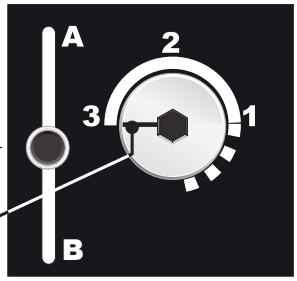
Position B for lighting

Operating Instructions

WARNING : DO NOT USE GASOLINE, LIGHTER FLUID, KEROSENE OR OTHER FLAMMABLE LIQUIDS TO START OR FRESHEN A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.

Slide lever from A to B to adjust burn type

Turn knob to adjust burn rate



Use the tool provided to adjust the stove's air controls

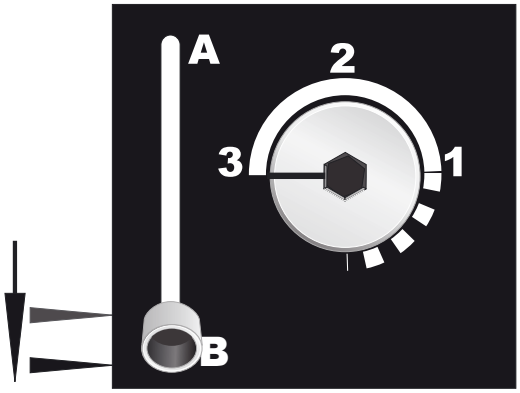
WARNING: Touching the air controls with bare hands while the stove is in operation may result in severe burns

Lighting a Fire

1. Open the ashpan door to access the air controls. Open the start up air intake by sliding the Burn Type Lever to position B. Be sure the ash drawer is closed and secured.
2. Open the Burn Rate Knob all the way by turning to the left. (on position 3). This knob may be turned manually (using the tool provided) or by pressing on the corresponding botton on the remote control (see remote control manual).

Burn Rate Knob set to maximum (3) when lighting

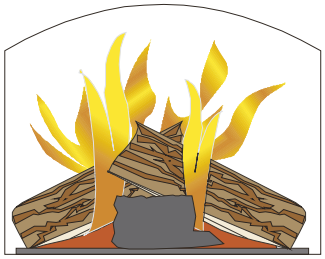
Burn Type Lever set to its lower most position (B) when lighting



The burn rate knob is rotated fully counter-clockwise to supply the stove with the maximum quantity of air because the flue will be cold. The burn type lever is set to its lower position to supply air to the fire from beneath the grate, accelerating the speed at which the fire size increases, as well as air above the fire to burn the volatile matter, reducing the smoke and lessening the production of glass staining tars.

3. Place 5 or 6 loosely crumpled sheets of newspaper in the bottom of the stove. Add a small amount of dry kindling on the top of the newspaper. Place a few more loosely crumpled newspapers on top of the kindling and light the bottom paper first, then light the top paper. The upper fire should preheat the chimney and create an effective draft while the lower fire ignites the kindling. Close the stove door.

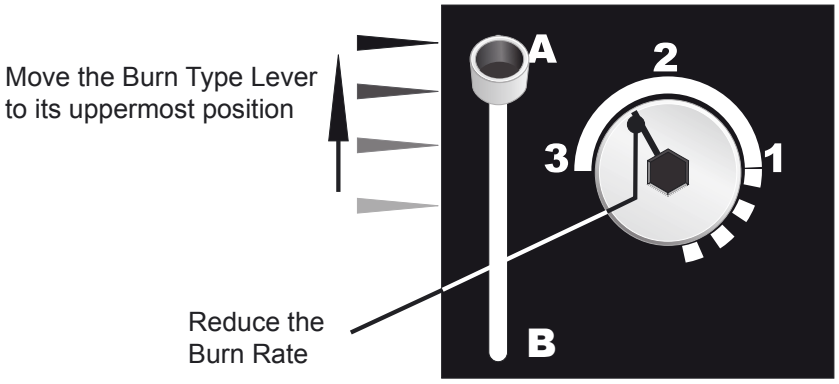
WARNING : DO NOT USE SUPPLEMENTAL GRATES, ANDIRONS, OR OTHER FUEL SUPPORT METHODS OTHER THAN THOSE SUPPLIED WITH THE STOVE.



TIPS ON BURNING WOOD

- Burn only dry seasoned wood.
- Control the fire with the **Burn Rate Control Knob** only.
- Do not operate with under-grate air
- Open the front door with caution when the appliance is in use.
- Load wood in such away that combustion air can pass between the logs. Do not stack the wood tightly together.

4. After the kindling is burning well, add increasingly larger pieces of wood until the fire is actively burning.
5. When the fire is well established, slide the Burn Type Lever to position A. Then adjust the Burn Rate Knob to the desired heat output, either manually or with the remote control.



As the fire grows and the flue warms, the Burn Type Lever can be moved in one or two stages to its uppermost position (A), and the Burn Rate Knob moved progressively (clockwise) to lower settings. Much will depend on the quality of the wood being used and the performance of the flue but the stove will normally be operating with the Burn Type Lever at position "A" and the Burn Rate Control reduced within a few minutes of lighting.

Do not position the Burn Type Lever in the low position ("B") during operation except during lighting.
The stove is designed to burn in a way that ensures all the volatile gases produced by the wood burn in a regulated manner. Introducing too much under-grate air will induce the wood to release more volatiles than the air supply can cleanly burn. If too much under-grate air is used when lighting, the volatiles released will chill below their ignition temperature, resulting in stained glass.

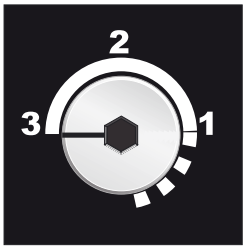
Use of the Optional Remote Control

This stove has the option of remote control. For full operating instructions for the remote control refer to the Remote Control Guide (ref. 22492).

Refuelling the Stove

Before reloading, rake a portion of the embers as well as any partially-burned logs towards the front of the stove. Place the new logs towards the back of the stove, as this will minimize the possibility of smoke reaching the glass and of the wood itself falling against the glass.

After reloading, close the stove door and turn the Burn Rate Knob to high setting for a while to re-establish a lively fire. Once the wood is burning at a brisk rate, turn the knob down to the desired heat output.



Refuelling "little and often" will give the most visually satisfying stove, and until you gain the experience in operating your stove it will be the simplest method of operation. Successfully burning large charges of fuel is only possible when you understand the operation of your stove, the performance of your chimney, and the characteristics of the wood you are burning.

Overnight Burning

If you fill your appliance with wood and close all air supplies (Burn Type Lever to A and Burn Rate Knob to 0), it is possible to achieve overnight burning though it is probable that the window glass will become dirty.
To keep the glass clean, we recommend you do not shut the air control knob completely but to leave it slightly open (on position 1), depending on how the chimney draws, to achieve slow burning for a maximum of 8 to 10 hours (with dry, good quality wood such as oak…). With a well-drawing chimney, the air control will need to be closed further than with poor drawing chimneys. Do not load un-split, round section logs as these will likely roll onto the glass and cause staining.

Ash Removal

Empty the ash pan regularly to prevent the ash from spilling over. Do not allow ash to build up and touch the under side of the grate.
A layer of ash left over the grate when burning wood will protect the grate, retain heat, and promote clean combustion.

CAUTION: THE ASH PAN MAY BE HOT. USE HIGH TEMPERATURE GLOVES.

Use the tool provided to open the latch on the ashpan door. It is best to empty the ashpan while the stove is not in operation.

To remove the ashes from the stove, push them down through the centre grate using the tool provided. Place ashes 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.

IMPORTANT NOTE: IF YOU MUST REMOVE THE ASH PAN WHILE THE STOVE IS OPERATING, IT IS ESSENTIAL THAT THE STOVE'S GLASS DOOR IS OPENED SLIGHTLY BEFORE OPENING THE ASH PAN DOOR. Failure to do so may cause damage to the appliance, especially the glass, because an excess of air intake could cause the stove to overfire.

Leaving the ash door of the stove open allows an uncontrolled air supply into the stove and may allow the stove to burn at a rate beyond its design capability. When removing ash pan, open the stove`s glass door slightly and replace the ash pan as soon as possible. Do not leave the ash pan door open during normal operation.

Guidelines for Safe Operation

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
Advise all adults and especially children to be alert to the hazard of high temperatures and that they should stay away to avoid burns.
Supervise young children when they are in the same room as the appliance and/or use a fire guard.
It is imperative that the control compartments and circulating air passageways of the appliance be kept clean.
The appliance should be inspected before use and the chimney cleaned at least annually. More frequent cleaning may be required due to poor operation, installation, or low quality fuel.

CAUTION:
HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.
CONTACT MAY CAUSE SKIN BURNS.
THIS ROOM HEATER IS AN APPLIANCE PRODUCING HEAT AND MAY CAUSE
SEVERE BURNS IF TOUCHED. KEEP CHILDREN AWAY.
ALL FURNISHINGS AND OTHER MATERIALS SHOULD BE KEPT A CONSIDERABLE
DISTANCE FROM THE APPLIANCE.
DO NOT OVER-FIRE. IF ANY PORTION OF UNIT OR CHIMNEY CONNECTOR STARTS
TO GLOW, YOU ARE OVER-FIRING.

This unit is designed as a radiant room heater and should be used for no other purpose. Be sure to provide combustion air into the dwelling when using the appliance. A partially open window or outside air register in the vicinity of the unit would be acceptable for this purpose.

Flue gas temperature

The most important aspect of stove operation is maintaining a high combustion temperature. If the combustion of the fuel is at the correct temperature, most of the soot and tars (hydrocarbons) are burned. These hydrocarbons, when not burned, can be seen as tar and creosote deposits on the internal surfaces of the stove, glass and chimney surfaces. To assist in maintaining these temperatures, a surface-mounted stove thermometer is recommended.
High combustion temperatures are the secret to clean glass operation. When loading wood, add one or two logs at a time, depending on size. Loading the appliance full of damp wood on a low fire is certain to cause poor combustion efficiency, resulting in tar and dirty glass.
It is recommended that you heat your stove to at least 400°F before reducing the air controls. This procedure should always be carried out after reloading.

Unattended Fires

Many structure fires have resulted when a slow burning fire has been left unattended for an extended period of time. These fires normally occur because combustible materials close to an appliance become heated to the ignition point by an over-fired appliance which the operator thought was safely “throttled down.”
Fire intensity is a function of several factors. One of these factors is draft. Normally, increasing draft increases fire intensity. Conversely, increasing the fire intensity will increase draft. Draft can also be affected by external factors such as wind strength and direction, outside temperature, airflow in or out of the structure, and so forth. If one of these factors changes, the draft of a low-burning appliance may increase. This increased draft may cause dangerously high temperatures to develop, possibly causing failure of the unit or flue, or ignition of nearby combustibles. Closing down the combustion air flow controls may not guarantee that this will not happen. Exercise extreme caution if a fire must be left unattended.

Procedure to Follow in Case of a Chimney Fire

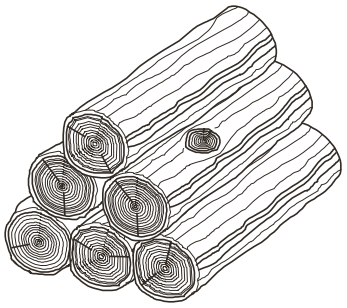
A. Prepare to evacuate to ensure everyone’s safety. Have a well-understood plan of action for evacuation. Have a place outside where everyone is to meet.
B. Close all the air controls on the stove.
C. Call the fire department. Have a fire extinguisher handy.
D. After the chimney fire is out, the chimney must be cleaned and checked for stress and cracks before re-use. Also check combustibles around the chimney and the roof.

Check daily for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire, the less creosote is deposited. Weekly cleaning may be necessary in mild weather even though monthly cleaning may be enough in the coldest months. Contact your local municipal or provincial fire authority for more information on how to handle a chimney fire. It is extremely important to have a clear plan on how to handle a chimney fire.

Choice of Firewood

Some types of wood are easier to light than others. The best fire wood, and easiest to light, is always dry wood. Using dry wood will minimize creosote buildup. Damp wood has far less heating power. It is difficult to light, burns badly and gives off smoke. This lowers the combustion temperature of the fire, and therefore the output. Above all, the use of damp wood causes the formation of deposits (tarring and soot staining) on the window glass and in the chimney flue, and could eventually cause a chimney fire.

Logs up to 18 inches in length allow for better stacking, filling and operation of your stove. Use dry wood which, by definition, is wood which has been dried under cover for more than 18 months so that the logs contain less than 20% moisture.



Wood supplied in ready-cut lengths stored immediately under a ventilated shelter dries quicker than wood stocked in high piles. Quarters (split wood) dry quicker than round logs. Wood which is too small to split must be drained, by removing some of the bark. Round logs left in the open for more than a year end up rotten. The drying time for the fire wood should be at least 18 months to 2 years. This period can be shortened (12 to 15 months) if the wood is cut to the right length and immediately stored under a ventilated shelter.

DO NOT USE FUELS OTHER THAN SEASONED WOOD.
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 IN USE.
DO NOT BURN TRASH OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.

Heating the air in a closed building decreases the relative humidity of the air, which will dry wood and other combustible materials. This drying lowers the ignition temperature of these materials, thus increasing the fire hazard. To reduce the risk of fire, some provision should be made for replenishing moisture to the air whenever a structure is being heated for extended periods.