

Maintenance Instruction

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Do I need an ash drawer?

An ash drawer is a very practical feature, but it is not absolutely necessary. The ash drawer enables you to empty your heater and leave the ashes in the drawer until it is full. It makes cleaning more convenient and less messy. If you do not have an ash drawer, you can scoop out the ashes into a small steel bucket (with a cover) that you leave near the appliance. ALWAYS MAKE SURE THAT THE EMBERS ARE COLD BEFORE DISPOSING OF THEM.

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Why has the paint turned white and how do I re-paint my heater?

As a result of the high temperatures reached on the surface of any wood heater, most types of high temperature paint will tend to discolor over time. However, if your paint has completely turned white in some areas shortly after you purchased your heater, it is a sign that it may have overheated. Many things can cause a unit to overheat. Here is a brief list:

- The air intake control has been left fully open and flue temperatures have reached excessive levels for a long period of time;
- The chimney draft is excessive;
- The door was left ajar for a long period with a fire going;
- The door gasket is worn out;
- The firebricks have been damaged or disintegrated and have not been replaced;
- Pressure treated wood or other bi-products of wood were used as fuel;
- An excessive quantity of manufactured logs were used in the heater.

It is important to identify why the heater has overheated. Otherwise, it may wear out prematurely. Make sure you use a chimney thermometer and keep flue temperatures within the comfort zone of 250 °F to 475 °F when the heater is operated in the slow combustion mode. It is okay to reach temperatures between 500 °F and 900 °F upon the start-up of the heater. The paint is tested to resist peak temperatures (non-continuous) of up to 1,200 °F.

You can paint your heater and make it look brand new. If the paint has not peeled off, you need to prepare the surface with a 180 grit sand paper. Then, repaint the heater with the original high temperature aerosol paint for a more resistant and uniform finish. If the paint has peeled off, you need to prepare the surface with a 180 grit sand paper and remove all the paint until you reach the steel.

Possible causes and solutions:

1- The moisture content of your wood is too high.

Solution: Make sure you use good, seasoned cord wood. The wood you burn plays an important role in the overall performance of your heater. Your wood should have been properly dried for approximately one year. Storage is also key. Wood that has been cut for one, two or even more years, will not necessarily be dry if it has been stored in poor conditions. Under extreme conditions, it may have rotten instead of drying. Smaller pieces of wood will dry faster. The wood should be stored in a place where the grass is not too long, and where the wind will be able to circulate between the logs. A 12-inch gap should be kept between the cords. The wood should be placed in the sunniest area and should be protected from the rain and snow on top, but not on the sides. Use a moisture reader to measure the moisture content of your wood. Ideally, it should be below 25%.

2- *The logs are positioned too close to the glass and are obstructing the air flow that is necessary to keep the glass clean.*

Solution: Make sure to keep a minimum gap of 2 inches between the logs and the glass.

3- *The chimney draft is too weak.*

Solution #1: In many cases, a weak draft is simply due to insufficient heat in the exhaust system. Build a small, intense fire, and leave the door ajar (never leave the heater unattended). Before inserting larger logs, use dry kindling to obtain a good bed of red embers. Gradually increase the size of the logs. Close the unit's door when you reach a flue temperature of approximately 475 °F on the chimney thermometer. Leave the air intake fully open for approximately 15 minutes. Then, gradually close the air intake control. Note that there is no danger in letting the temperature inside the flue reach approximately 700 °F during the start-up. This is even favorable in order to properly start your heater. You must, however, avoid maintaining excessive temperatures (above the comfort zone on your thermometer) during a long period of time. Your chimney thermometer should be positioned on the exhaust pipe, approximately 18 inches above the unit.

Solution #2: Your heater may not have all the oxygen it needs to allow for a sufficient draft. You first need to insure that the room where the heater is located is sufficiently large and well ventilated. Open the nearest window by approximately 2 inches. If you notice a significant improvement, it is a sign that the unit needs more oxygen. The room may be too insulated or too small. Without an additional source of oxygen, the draft will remain weak and cause the glass stay dirty.

Solution #3: The chimney may be too short. In order to obtain a sufficient draft, your chimney must have a minimum height. Twelve feet (from the heater to the chimney cap outside the house) is a minimum. A height of 15 feet or higher is ideal.

Solution #4: Your exhaust system may be too tortuous or may lack a sufficiently steep slope. Ideally, your exhaust system should not have more than one 90° elbow. Furthermore, all horizontal sections should be as short as possible and have a minimum slope of ¼" per foot.

Solution #5: Your exhaust system may be oversized. When your chimney is oversized, the volume of air that needs to be warmed-up is larger. It is therefore difficult to reach temperatures that will allow for a sufficient draft. Most advanced combustion systems (those certified to EPA/CSAB415.1-10) have a 6" flue outlet (152 mm). If your exhaust system does not have a 6" diameter, a solution is to insert a stainless liner with a 6" diameter inside the exhaust system.

Can I install a wood heater in a mobile home?

Yes, but the heater you install must be specifically approved for a mobile home application. The heater must be hooked-up to a fresh air pipe that enables combustion air to come from outside the house. For most models, it is necessary to purchase an adapter that allows the connection of the fresh air pipe to the appliance. Consult our product literature to know if a particular model is mobile home approved. The fresh air pipe used should be rated for temperatures of 250 °F (122 °C) or more and should be insulated to prevent or limit condensation. Normally, this type of pipe meets the UL-181/ULC-S110 standard for Class 1 HVAC connectors.

Is the smoke produced during the paint curing process harmful?

First Fires

Most high-temperature paints react in the same way. There are two resins in the paint. One resin dries at room temperature, giving the paint the initial properties seen on a brand new stove. Then, when fires are built in the stove, this air-dry resin burns away. The other resin is a silicon resin (silicone gives the paint its high heat resistance) that will not cure until the appliance is heated at high temperatures. This occurs at around 400 °F – 450 °F. The air dry resin will burn away at about 600 °F.

We recommend a two-stage curing process. Do not burn at full heat (keep temperature below 900 °F) for the first two burns as this could “shock” the paint and cause damage. Paint may peel or discolor. The initial fire should be made at a medium temperature (450 °F) for about 60 minutes. As the paint heats-up, it will soften and even appear wet. It should not be touched with anything. Gradually, on the hottest spots (usually near the flue and working outwards) the paint will again appear dry. When this process is completed, the paint will be ready for the next stage.

A second, hotter burn of around 600 °F for another 45 minutes will burn away the air-dry resin. You will know when this occurs because the process creates some smoke and odour. The non-toxic smoke is primarily carbon dioxide, but there are other residual components that make it smell bad and may cause physical distress for some individuals or animals. This is why we recommend keeping the space vacant and ventilated. Until the second stage is reached, the curing process will be incomplete.

Paint may appear to be a little glossy when first applied. High heat will cause all liquid paint to lose its glossy appearance.

How do I reduce the amount of charcoal my heater produces?

Appliances that are EPA or CSAB415.1 certified tend to create larger coal beds due to their higher efficiency. This can be controlled by the way you burn your appliance. After an overnight burn, you may have a more significant coal bed. Simply rake the coal bed forward and add a smaller piece of wood on top. Burn the appliance on a higher setting (air control fully open). This will pull more primary air into the firebox and will increase draft. The coal bed will burn down with the log. You may have to repeat this operation a couple of times before the coals are reduced. You are then ready to load your appliance with a larger fuel load.