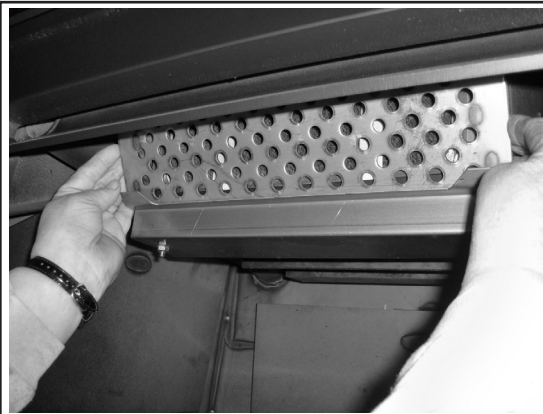




7. Once the combustor is fully reinserted into the opening of the dome housing, replace the flame shield. Note the flame shield sides are shaped like a triangle. The point of the triangle should face down to install correctly. Do not operate your appliance without the flame shield in place. The flame shield protects the face of the combustor against direct flame impingement and potential collisions when loading fuel.



8. When correctly installed, the flame shield will rest on the two tabs located on the dome guard and will lean slightly forward. Now that the combustor and flame shield have been properly reinstalled, the appliance can be relit.

A few reminders, do not burn anything other than dry, seasoned cordwood. Burning other materials may contaminate or ruin your new combustor. Also, remember to keep your firebox door gasket seal properly adjusted (please refer to the “**LOADING DOOR TENSION ADJUSTMENT**” section). Doing so will ensure optimal performance of both the appliance and the combustor.

### COMBUSTOR WARRANTY

This appliance contains a catalytic combustor, which needs periodic inspection and may require replacement for proper operation. It is against federal regulations to operate this appliance if the catalytic combustor is deactivated or removed.

The catalytic combustor supplied with this appliance is **OEM Blaze King part # S.CAT203032**.

Please consult the catalytic combustor warranty info also supplied with this appliance. Warranty claims should be addressed to:

CANADA	USA
Blaze King Industries / Valley Comfort Systems Warranty Department 1290 Commercial Way Penticton, BC, Canada V2A 3H5	Blaze King Industries Warranty Department 146 A Street Walla Walla, Washington, USA 99362

**COMBUSTOR TROUBLESHOOTING****PROBLEM: CREOSOTE PLUGGING**

**Possible Cause:** The combustor is coated with creosote burning material that produces substantial char and fly-ash.

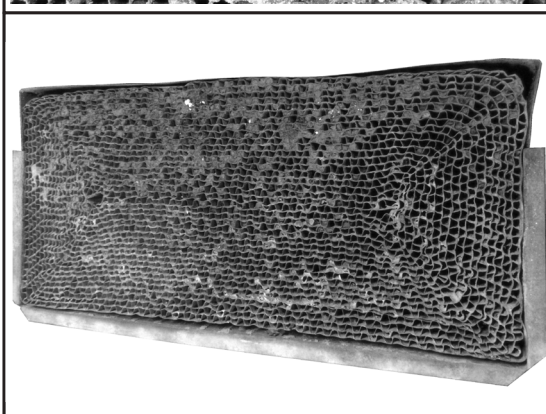
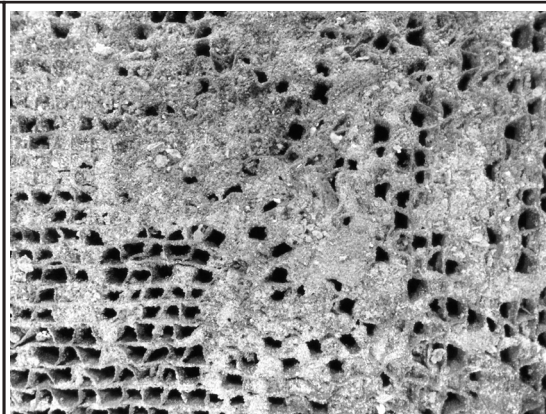
**Solution:** Only burn dry, seasoned wood. Do not burn materials such as garbage, gift wrap, or cardboard.

**Possible Cause:** Burning wet, pitchy wood or burning large amounts of small diameter wood with the bypass door closed without the catalytic thermometer needle in the ACTIVE zone.

**Solution:** Burn dry, seasoned wood and do not close the bypass door until temperatures are high enough to initiate catalyst light-off (indicated by the catalytic thermometer needle in the ACTIVE zone).

**Possible Cause:** Combustor not functioning.

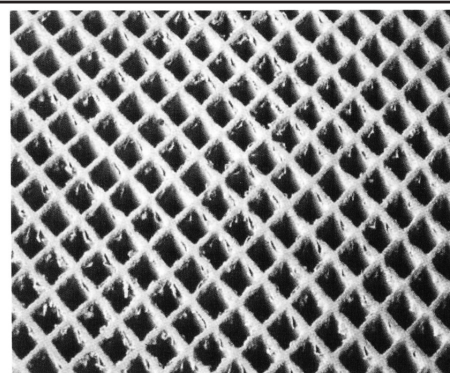
**Solution:** If proper burning procedures have been followed and this problem persists, replace the combustor with an OEM Blaze King combustor (failure to do so will void your warranty).

**PROBLEM: COMBUSTOR PEELING**

**Possible Cause:** Over firing and flame impingement can yield extreme temperatures (above 1800F/1000°C) at combustor surface and can cause peeling.

**Solution:** Avoid extreme temperatures by adjusting size of fuel loads. If peeling is severe, replace combustor.

The images to the right are examples of minor peeling (does not affect proper combustor function) and severe peeling (closed or plugged combustor that needs replacement).

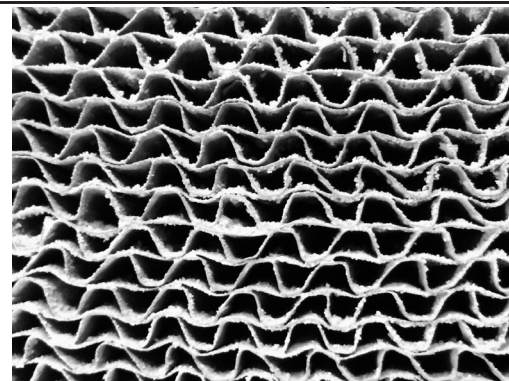


Minor Peeling

**PROBLEM: CATALYTIC DEACTIVATION**

**Possible Cause:** Burning improper fuels (ie. garbage, pressure-treated lumber, painted wood, etc.).

**Solution:** Burn good quality, dry, seasoned wood. If proper burning procedures have been followed and this problem persists, replace the combustor with an OEM Blaze King combustor (failure to do so will void your warranty).



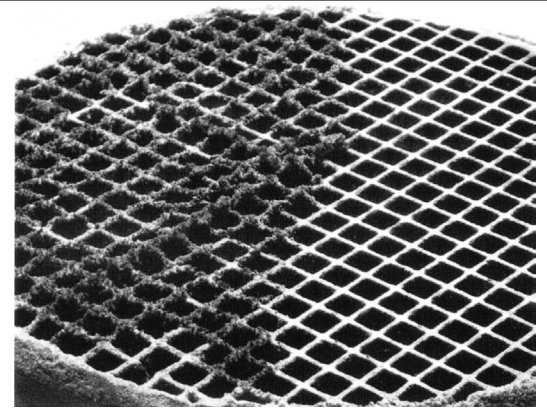
Severe Peeling



**PROBLEM: COMBUSTOR MASKING**

**Possible Cause:** The combustor is coated with a layer of fly-ash or soot from burning material that produces substantial char and fly-ash.

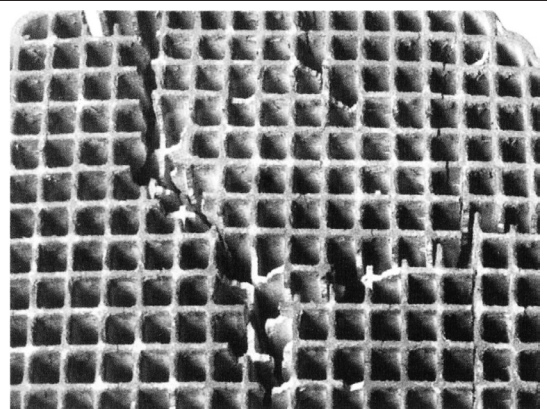
**Solution:** When the appliance is cool to touch, clean the front face of the combustor with a soft-bristled brush or vacuum lightly (refer to *COMBUSTOR CLEANING* for proper procedure).

**PROBLEM: THERMAL CRACKING**

**Possible Cause:** Extreme temperature fluctuations (ie. opening loading door while the combustor is in the ACTIVE zone) can cause thermal shock which can lead to cracking.

**Solution:** Avoid flooding a hot, active combustor with cool room air when reloading.

If cracking causes large pieces of the combustor to separate, replace the combustor with an OEM Blaze King combustor (failure to do so will void your warranty).

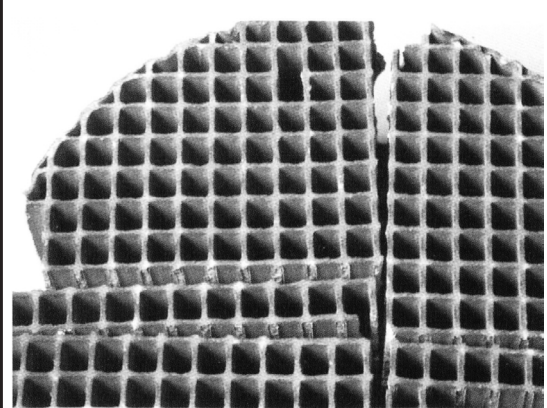
**PROBLEM: MECHANICAL CRACKING**

**Possible Cause:** Mishandling the combustor or operating the appliance without the proper gasket installed.

**Solution:** Handle with care. Ensure combustor is wrapped with gasket upon reinstallation.

**Possible Cause:** Distortion of surrounding dome housing.

**Solution:** The combustor should slide in and out of the dome housing with relative ease. If this is not the case, contact your dealer for further inspection.

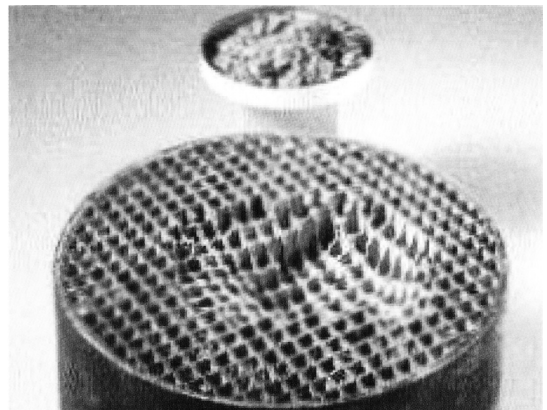
**PROBLEM: COMBUSTOR CRUMBLING**

**Possible Cause:** Excess air leaking into the firebox.

**Solution:** Ensure tight seal at loading door (see *MAINTENANCE* for instruction on gasket inspection).

**Possible Cause:** Excessive chimney draft.

**Solution:** Use a monometer to check and ensure chimney draft is within manufacturer specifications. Adjusting the appliance thermostat can help regulate chimney draft.



**⚠ WARNING**

**TO PREVENT SERIOUS BURNS, DO NOT PERFORM ANY MAINTENANCE UNTIL THE APPLIANCE IS COOL. APPLIANCE SURFACES, INCLUDING THE GLASS AND ANY ATTACHED COMPONENT, WILL REMAIN HOT FOR EXTENDED PERIODS OF TIME AFTER THE FIRE HAS BEEN PUT OUT.**

**RECOMMENDED MAINTENANCE**

It is strongly recommended to complete the following tasks on a regular basis throughout the heating season:

1. Visually inspect Catalytic Combustor and clean as required (see “**COMBUSTOR CLEANING**”)
2. Clean behind internal baffles (where applicable) and inspect metal components for warping/distortion.
3. Check Catalytic Thermometer for proper calibration.
4. Check Thermostat for proper function.
5. Check Fan Assemblies for proper operation.
6. Remove all ash from firebox and ash drawer after final burn of season.
7. Check all gaskets for proper seal and adjust as required.
8. Inspect and clean the Venting System.

**CATALYTIC THERMOMETER MAINTENANCE**

The catalytic thermometer probe (shaft) should be cleaned regularly. Ensure the fire is out and the appliance is cool, then remove the thermometer and wipe the probe clean. While removed, confirm the thermometer indicator needle points towards the bottom of the INACTIVE zone (allow the thermometer to sit at room temperature for 10 minutes before checking). If the needle does not point towards the bottom of the INACTIVE zone, it may need adjustment. Grasp the probe with a pair of pliers then slightly loosen the bolt on the top of the dial. Turn the dial to align the needle to the bottom of the INACTIVE zone and then retighten the bolt. Once finished, reinsert the thermometer back into the appliance. **Note: If your appliance is equipped with an optional fan kit, turn it off and wait 10 minutes before observing the catalytic thermometer reading.**

**THERMOSTAT MAINTENANCE**

Any thermostat maintenance must be completed by a certified installer. If the thermostat malfunctions, contact your dealer for replacement.

**OPTIONAL FAN ASSEMBLY MAINTENANCE**

Fan assemblies should be inspected at the beginning of each burn season to ensure they are free from debris such as ash, dust, pet dander, lint, etc. The accumulation of such debris could prevent the fan blades/blower wheels from rotating freely and put excessive strain on the fan motors, ultimately leading to failure.

**ASH REMOVAL**

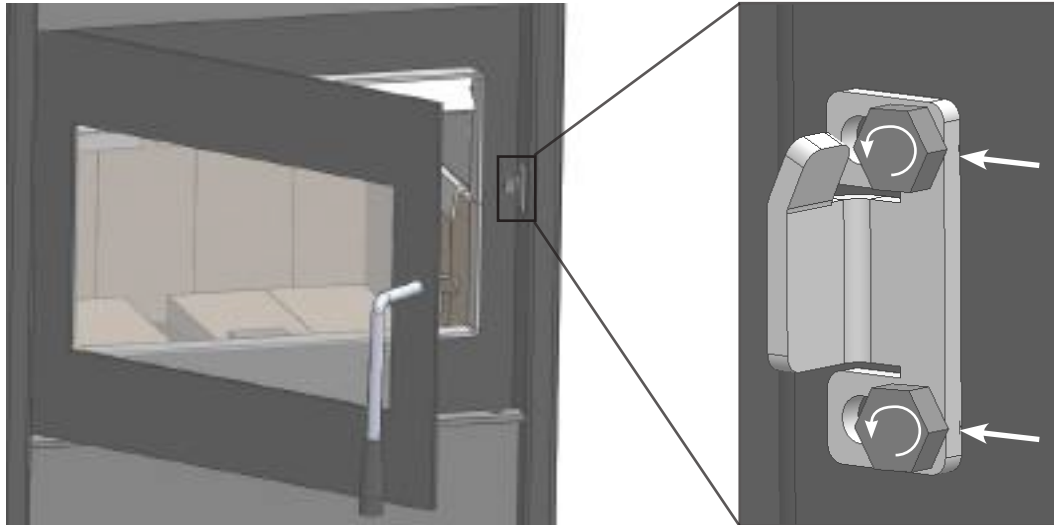
Ashes should be removed any time they come within one inch of the door opening, though it is not advisable to completely remove all of the ashes as wood burns best on a bed of ashes around 1/2” thick. When removing ashes, ensure the fire is out and the appliance is cool to touch. Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground (outside), well away from all combustible materials, while awaiting 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. Do not place other waste in this container.

**⚠ WARNING**

**NEVER STORE HOT ASHES IN A GARAGE OR BASEMENT. HOT ASHES WILL GENERATE CARBON MONOXIDE AND / OR FLAMMABLE GASES. THESE GASES MAY CAUSE SUFFOCATION AND POSSIBLE DEATH.**

**LOADING DOOR TENSION ADJUSTMENT**

To tighten the loading door seal, use a 7/16 wrench to loosen latch catch bolts and move latch catch inwards. Tighten the bolts and preform a paper test (see “*DOOR GASKET PAPER TEST*”) to ensure the proper seal was achieved.

**LOADING DOOR GASKET INSPECTION**

Inspect the loading door gasket for physical deterioration, missing sections, or obvious leakage. The appliance door flange should make a groove in the gasket material. The side of the gasket on the inside of the groove will be dark or black while the outer side will be light or white. Dark smudges on the outer side of the gasket may indicate an air leak. If the groove in the gasket is very shallow or if there is a heavy ash or creosote deposit along the bottom edge of the gasket, it may need to be replaced. Frayed or broken gasket material, or a gasket that is hard and unyielding, will also indicate a need for replacement. Any time a piece of gasket is missing or broken the entire gasket must be replaced. A way to physically check if the gasket needs replacing is by performing a paper test (see “*DOOR GASKET PAPER TEST*”).

**LOADING DOOR GASKET REPLACEMENT**

If door gasket replacement is required, only replace with OEM door gasket ordered through your Blaze King dealer. This gasket will be properly sized and ready to install. **Do not stretch or cut the gasket at any time during this installation. Ensure only high temperature silicone adhesive is used for this installation (do not use household silicone caulking). Blaze King recommends that your dealer perform this task:**

1. Ensure the fire is out and the appliance is cooled to touch before removing the loading door.
2. Use a pair of pliers to pull the old door gasket out of the channel and dispose of it.
3. Clean the gasket channel of any residual adhesive to ensure the new adhesive will adhere sufficiently.
4. To ensure proper fit, dry fit the new gasket by distributing it evenly around the frame and then remove.
5. Run a small bead of a high temperature silicone adhesive along the center of the gasket channel.
6. Starting in the lower right corner, insert the new gasket into the gasket channel. Be sure to distribute the gasket evenly around the entire channel frame.
7. Allow the adhesive to dry for at least 1 hour before reinstalling and closing the loading door.
8. Confirm proper gasket installation by performing a paper test (see “*DOOR GASKET PAPER TEST*”).

**⚠ WARNING**

**DO NOT OPERATE THIS APPLIANCE IF THE DOOR GASKET IS MISSING OR DAMAGED. OVER-FIRING MAY OCCUR WHICH CAN CAUSE DAMAGE TO THE APPLIANCE OR IGNITE CREOSOTE IN THE CHIMNEY WHICH COULD LEAD TO A HOUSE FIRE CAUSING SERIOUS BODILY HARM.**

***DOOR GASKET PAPER TEST***

Perform this test when inspecting or replacing loading door gasket:

1. Ensure the fire is out and the appliance is cooled to touch.
2. Insert a piece of paper (ie. a dollar bill) into the door opening and then latch the door shut.
3. Pull the paper out of the door while noting any obvious resistance when doing so.
4. If no resistance is felt, adjust the door tension (see “***LOADING DOOR TENSION ADJUSTMENT***”).
5. Repeat this process around the perimeter of the door until consistent resistance is achieved.

***DOOR GLASS GASKET INSPECTION***

To inspect the door glass gasket:

1. Ensure the fire is out and the appliance is cooled to touch.
2. Hold the glass by placing the palm of each hand on either side and try to move it; If the glass moves:
  - a. Inspect the glass retainers and ensure the screws holding the retainers in place are tight (hand tight plus 1/4 turn). If loose, retighten, but do not over tighten.
  - b. Inspect the door glass gasket. If the gasket is frayed or missing sections, replace the gasket.

**⚠ WARNING**

**REFRAIN FROM STRIKING THE GLASS OR SLAMMING THE DOOR SHUT. DO NOT OPERATE THIS APPLIANCE IF THE DOOR GLASS OR GASKET SEAL IS BROKEN. DOING SO MAY LEAD TO A RUN AWAY FIRE WHICH COULD RESULT IN PROPERTY DAMAGE.**

***DOOR GLASS GASKET REPLACEMENT***

If door glass gasket replacement is required, only replace with OEM door glass gasket ordered through your Blaze King dealer. The OEM gasket will be ordered to size and ready to re-install. **Do not stretch or cut the gasket at any time during this installation. Blaze King recommends that your dealer perform this task:**

1. Ensure the fire is out and the appliance is cooled to touch.
2. Remove the old glass gasket.
3. Starting at the corner opposite of the “Blaze King” logo, carefully wrap the gasket around the edges of the door glass, pressing firmly onto the sides of the glass with the gasket centered on the edge. Finish the wrapping with a 1/2” overlap. Ensure the thickness of the gasket remains consistent and uniform.
4. Reposition the glass onto the door and then install the glass retainers with original fasteners. Ensure the glass is parallel to the frame and tighten the fasteners (hand tight plus 1/4 turn).

