

AES Informational Bulletin

Topic: Burn Back into the Hopper Area

Models: All Magnum and Country Flame corn/wood pellet burning appliances

There are a number of factors that can cause a burn back into the Hopper:

- 1. Excessive buildup of fuel/clinkers in the firepot, causing fuel to back up into the auger tube.
- 2. Poor quality fuel. (i.e., a lot of saw dust, fines, high moisture, etc.)
- 3. Fuel bridging in the drop tube from lack of maintenance, poor fuel quality.
- 4. Negative pressure in the building. Cause by outside air not hooked up or venting not balanced.
- 5. Hopper lid left open causing the fire to be pulled back into the auger tube.
- 6. Hopper not vacuumed out regularly as outlined in operations manual.
- 7. Unit needing maintenance check venting/combustion air for plugging.
- 8. Silicone seals damaged from use or hopper seal broken.
- 9. Appliance located in area where there is no air exchange causing heat buildup.

Burn back into the Hopper can be prevented by following these tasks:

- 1. Make sure the firepot is always cleaned and maintained.
- 2. Use only high quality, clean, dry fuel. .
- 3. Change the fuel you're using if it has excessive fines, dust or is old.
- 4. Make sure the home is balanced and no negative pressure exists.
- 5. Keep the hopper lid closed while the stove is in operation.
- 6. Always perform regular maintenance especially on venting and seals. (Reference Owner's Manual)
- 7. Install your appliance in a location where heat is circulated properly

If you have had a Burn back into the Hopper area you <u>must</u> have the following performed by a qualified technician:

- 1. Check the unit for any signs of physical damage and make necessary repair before operation.
- 2. Check all silicon/hopper seals to assure that they have not been damaged.
- 3. Check the auger for any 'gummy' type substance. If substance is present thoroughly clean auger.
- 4. Test fire the unit and do proper maintenance.
- 5. Correct any negative pressure issues and resolve what caused the burn back.
- 6. Verify that the unit was installed correctly.

NOTE: If the temperature exceeds 225° or 250° (depending on which model stove) in the hopper the high temperature thermostat will trip and shut the unit down. The 225° will automatically reset itself, the 250° is a manual reset disk that must be reset before resuming operation. Please reference your owner's manual for proper location and how to reset.

NOTE: A burn back into the hopper is not a design flaw or a warranty issue. This is a preventable situation and will not happen if the appliance is installed, maintained and operated according to the manufacturer's specifications. If you have had a burn back into the hopper area it is important that you have your appliance inspected to assure that you have not damaged the unit and that the unit is installed and operated properly in the future.