



American Energy Systems Inc *AES Information Bulletin*

Excessive or Impeded Fuel Delivery/Consumption

Product models covered: All Magnum & Country Flame Biomass/Corn/Agri-fuel Models

Excessive fuel rate: Exceptionally dry fuel, smaller than normal size of fuel, excessively high voltage to unit, non grounded outlet, overloaded outlet, polarity of current reversed, change from low test weight corn to high test weight corn, changing from dirty wet corn to clean dry corn

Impeded or sporadic feed rate: Wet/dirty fuel, larger than normal size of fuel, low voltage to outlet, non grounded outlet, overloaded outlet, polarity of current reversed, scoured auger system, bent auger, dirty auger motor, loose auger coupling collar (set screw loose),

What to look for: Higher or lower than normal feed rates with fires going out unexpectedly or firepots overflowing and it is hard to get air adjusted. Unit shuts down because high limit sensor trips out; unit shuts down because low limit sensor trips out.

Facts: Because of the many different fuels that these appliances can burn, there will be different fuel rates when burning different fuels. Because of the many hybrids and conditions of corn on the market the fuel feed rates can vary as much as 15-30%. This is not a cause of the appliance but the conditions that are not predictable. The appliance is adaptable to most fuels simply by changing the heat setting and correcting the manual air damper setting.

Most erratic feed rates are a result of poor quality fuel, wet/dirty fuel, and improper venting configuration or negative air situations within the home. Sometimes a firepot overflowing is diagnosed as overfeeding but really is something else like wet fuel, gaskets leaking, ash pan overflow or doors not sealed. Be sure to check out the appliance completely before changing parts.

Repair/replacement procedure: If it is determined that the auger system is damaged or the auger motor is in need of replacing, unplug the stove before servicing. Call your local dealer or service tech for help in replacing the auger or auger motor.

If all parts are in proper working order and your fuel is clean and dry, but you are experiencing excessive fuel feed rates contact your local dealer or service tech for help in determining what steps can be taken to help you.

Most erratic feed rates will be corrected by making sure your fuel is clean, dry and consistent. Your appliance can adapt to most changes in feed rates unless it is not installed properly, vented properly or the house is not balanced properly so that the appliance can get appropriate combustion air. It might be as simple as the unit is plugged and needs a thorough cleaning.