

TROUBLE SHOOTING GUIDE

When your stove acts out of the ordinary, the first reaction is to call for help. This guide may save time and money by enabling you to solve simple problems yourself. Problems encountered are often the result of only five factors: 1) poor fuel; 2) poor operation or maintenance; 3) poor installation; 4) component failure; 5) factory defect. You can usually solve those problems related to 1 and 2. Your dealer can solve problems relating to 3, 4 and 5.

For the sake of troubleshooting and using this guide to assist you, you should look at your control board display to see what the error is.

- **Disconnect the power cord before performing any maintenance! NOTE: Turning the ON/OFF Switch to “OFF” does not disconnect all power to the electrical components of the stove.**
- **Never try to repair or replace any part of the stove unless instructions for doing so are given in this manual. All other work should be done by a trained technician.**

SYSTEM SENSOR CHECK PROCEDURE

To perform a system sensor check the stove must be plugged in, cool and off.

- 1) Turn the stove on
After a few seconds the controller will ask a series of questions. Answer the questions as shown to proceed with the system check.
- 2) Q1) Is there a fire in the burnpot?
A1) No (press the left or down arrow key)
- 3) Q2) Do you want to start a fire?
A2) No (press the left or down arrow key)
- 4) Q3) You can start a fire latter.
A3) OK (press any arrow key)
- 5) You should now see the main menu on the controller.
- 6) Press menu four (4) times until you see “Sensor info”
- 7) Press up to select sensor info.
- 8) You should now see the sensor status.

Note that all the sensors say OK except Fuel and Trap Door.

- 9) To check the trap door sensor, manually hold the trap door open with the trap door handle on the back of the stove. Once the door is open the sensor status should change to OK.
- 10) Open the Hopper lid to check that the sensor is working correctly. The status should change to “XX” when the hopper lid is open.
- 11) To exit the system sensor check press menu until the controller asks if you want to start a fire.

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Fuel Feed Problems	➤ Lack Of Fuel In Burnpot ➤ To Much Fuel In Burnpot
Possible Causes:	Possible Remedies: (Unplug Stove First When Possible)
<u>FUEL</u>	
The hopper is out of pellets.	Refill the hopper.
The hopper safety switch has failed or hopper is open.	When operating the unit, be sure the hopper lid is closed so that the hopper safety switch will activate. Check the wires leading from the hopper safety switch to the control panel and auger motor for secure connections. Use a continuity tester to test the hopper safety switch; replace if necessary.
Fuel other than wood pellets is being burned in the stove.	This pellet stove is designed and tested to use wood pellets. Check for signs of fuel other than wood pellets. No other types of fuel have been approved for this pellet stove. If there are signs of other types of fuel being used, stop using them immediately.
Bad pellets. (Causes glass to “soot” up at a very fast rate only)	The brand of pellets or the batch of pellets that are being used may be of poor quality. If possible, try a different brand of pellets. You might also want to try a brand that is made from a different type of wood (softwood vs. Hardwood). Different woods have different characteristics when being burned.
<u>AUGER</u>	
Auger jam.	Start by emptying the hopper. Then remove the auger motor remove the auger shaft inspection plate in the hopper so that you can see the auger shaft. After you have removed the shaft, inspect it for bent flights, burrs, or broken welds. Remove any foreign material that might have caused the jam. Also, check the auger tube for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam.
The auger motor has failed.	Remove the auger motor from the auger shaft and try to run the unit. If the motor will turn, the shaft is jammed on something. If the motor will not turn, the motor is bad.

Controls / Operation Problems	➤ Thermostat malfunction
Possible Causes:	Possible Remedies: (Unplug Stove First When Possible)
<u>CONTROL / OPERATION</u>	
The thermostat is not controlling the stove.	The t-stat sensor has come unplugged from the control board. Check to see if the sensor is unplugged. If the sensor is not unplugged, then the sensor is damaged, has a short or the jumper has been left on the board. If the sensor is damaged or has a short, it will need to be replaced.
The stove is being left on the highest setting for extended periods of time.	If operating the heater on the highest heat setting, the room temperature could increase enough and lead to potential overheating situations. If this happens, try operating at a lower heat setting.

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<u>WIRING & CONTROLS</u>	
Loose wire or connector.	Check all wires and connectors that connector to the auger motor, high limit switch, and the molex connector.
Bad control board.	If the fuse is good, the wires and connectors check out good, and the high limit switch did not trip, test for power going to the auger motor. If there is not a full current going to the auger motor when the fuel feed light is on, you have a bad control board.
Circuit board malfunction.	If the auger motor runs constantly, the board is bad.
The control board is not sending power to the fuel sensor thermdisc or other auger system components.	There should be a 5-volt (approximately) current going to the fuel sensor thermdisc after the stove has been on for 10 minutes.
The proof of fire (Fuel sensor) thermdisc has came unplugged.	Check the (Fuel sensor) thermdisc to see if the wires are connected properly.
The proof of fire (Fuel sensor) thermdisc has malfunctioned.	Temporarily bypass the Fuel sensor thermdisc by disconnecting the two wires and connecting them with a short piece of wire. Then plug the stove back up. If the stove comes on and works, you need to replace the Fuel sensor thermdisc. This is for testing only. Do not leave the thermdisc bypassed. Your blowers will never shut off and if the fire went out the auger will continue to feed pellets until the hopper is empty if you leave the fuel sensor thermdisc bypassed.
Power surge or brown out situation.	A power surge, spike, or voltage drop could cause the high limit switch to trip. Use a surge protector.

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Air Supply / Ventilation Problems	<ul style="list-style-type: none"> ➤ Glass “Soot’s” Up At A Very Fast Rate, ➤ Flame Is Lazy, Dark, And Has Black Tips , ➤ After Stove Has Been On For A While, The Burnpot Overfills
Possible Causes:	Possible Remedies: (Unplug Stove First When Possible)
<u>EXHAUST / VENTILATION</u>	
There is a leak in the vent pipe system.	Inspect all vent pipe connections. Make sure they are sealed with RTV silicone that has a temperature rating on 500 degree f or higher. Also, seal joints with ul-181-ap foil tape. Make sure the square to round adapter piece on the combustion blower has been properly sealed with the same rtv.
Vent pipe installed improperly.	Check to make sure the vent pipe has been installed according to the criteria in the owner’s manual.
Stove or vent pipe is dirty, which restricts airflow through the burnpot.	Follow all cleaning procedure in the maintenance section of the owner’s manual.
<u>COMBUSTION AIR</u>	
The air inlet, or the interior chambers have a partial blockage.	Follow all cleaning procedures in the maintenance section of the owner’s manual.
Blockage in air intake pipe.	Visually inspect the air intake pipe that leads into the burnpot for foreign material.
The firebox is not properly sealed.	Make sure the door is closed and that the gasket is in good shape.
<u>AIR DAMPER</u>	
The air damper is too far open for a low feed setting.	If on the low setting, you may need to close the damper all the way.
Air damper is set too far closed for a higher setting.	Pull the damper knob to the left and try to burn the unit again.
Air damper is broken.	Visually inspect the damper assembly. Make sure the damper plate is attached to the damper rod. When the damper rod is moved, the plate should move with it.

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BLOWER	
The gasket on the blower has gone bad.	Inspect both gaskets on the combustion blower to make sure they are in good shape. Replace if damaged.
The blower is overheating and tripping the internal temperature shutoff.	Clean any dust off of the windings and fan blades. If cleaning the blower does not help, the blower may be bad.
Blower failure.	With the stove on, check to see if the blower is running. If it is not, you will need to check for power going to the blower. It should be a full current. If there is power, the blower is bad. If there is not the control board may be malfunctioning.
WIRING & CONTROLS	
Circuit board malfunction.	Test the current going to the convection blower. If there is power being sent to the blower when it is shut off, then the control board is fine. If there is not power being sent to the blower when it shuts off during operation, then you have a bad control board.
7. Control board not sending power to combustion blower.	If there is no current going to the combustion blower, check all wire connections. If all wires are properly connected, you have a bad control board.
9. Air switch has failed.	To test the air switch, you will need to disconnect the air hose from the body of the stove. With the other end still attached to the air switch, very gently blow on the loose end of the hose (you may want to remove the hose entirely off the stove and the air switch first and make sure it is clear). If you hear a click, the air switch is working. Be careful too much vacuum can damage the air switch.
1. Airflow switch hose or stove attachment pipes for hose are blocked.	Unhook air hose from the air switch and blow through it. If air flows freely, the hose and tube are fine. If air will not flow through the hose, use a wire coat hanger to clear the blockage.
5. The airflow switch wire connections are bad.	Check the connectors that attach the blue wires to the air switch.
8. Control board not sending power to air switch.	There should be a 5-volt current (approximately) going to the air switch after the stove has been on for 30 seconds.