

TROUBLESHOOTING	Document #	Model Name and Number		
	Document Version	Serial Number		Date
			to	



WARNING

NEVER MANIPULATE OR REPLACE A COMPONENT WHEN THE STOVE IS HOT.



DANGER

DISCONNECT ALL SOURCE OF POWER BEFORE MANIPULATING OR REPLACING A COMPONENT.

For part numbers visit our web site <https://www.osburn-mfg.com/en/replacement-parts/> For more information, contact us at 418-908-8002 or by email at tech@sbi-international.com

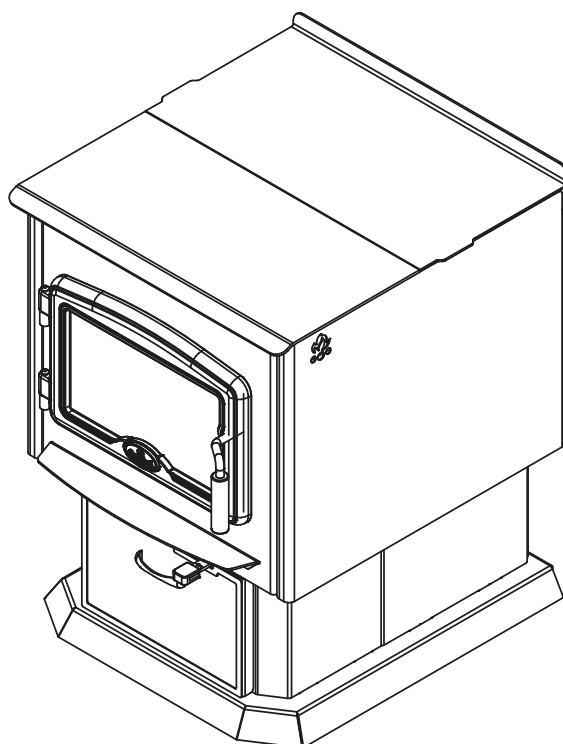


Table Of Contents

Troubleshooting.....	2
Validating Status.....	2
Testing Components.....	4
Main Error Codes, Possible Causes and Solutions.....	4
No Fuel	6
Failed Ignition.....	8
Defective Igniter Fuse	8
Gear Fuse.....	9
Combustion Air Starvation	10
The LCD Touch Screen Does Not Lightup.	10
Hopper Lid Open	10
Power Loss	11
Unit Overheat	11
Smoke Smell	13

Troubleshooting

When you have issues with your stove, your first reaction may be to call technical support. This section will help you save time and money by enabling you to solve simple problems by yourself.

Most common problems are generally caused by the following five factors:

1. Wrong operation or lack of maintenance;
2. Bad installation;
3. Poor quality combustible;
4. Component failure;
5. Factory defect.

The stove is equipped with a pc board that allows the stove to diagnose itself. It is thus important not to unplug the stove if there is an issue with it. First, because unplugging the stove will disable all the security features of the stove, and second, because you will not be able to see the error code given by the stove to understand what is the problem. It is thus important to read carefully this section before calling technical support.

The following sections will help you test each component individually and will also give you many tips in how to solve any problems related to a specific error code.

NOTE: IF YOU NEED TO CONTACT YOUR DEALER OR TECHNICAL SUPPORT, MAKE SURE TO HAVE THE MODEL OF YOUR STOVE AND THE SERIAL NUMBER ON HAND. (THEY CAN BE FOUND ON THE CERTIFICATION LABEL INSIDE THE HOPPER LID).

Validating Status

When using your stove, you can validate at any time, the status of any of the following components:

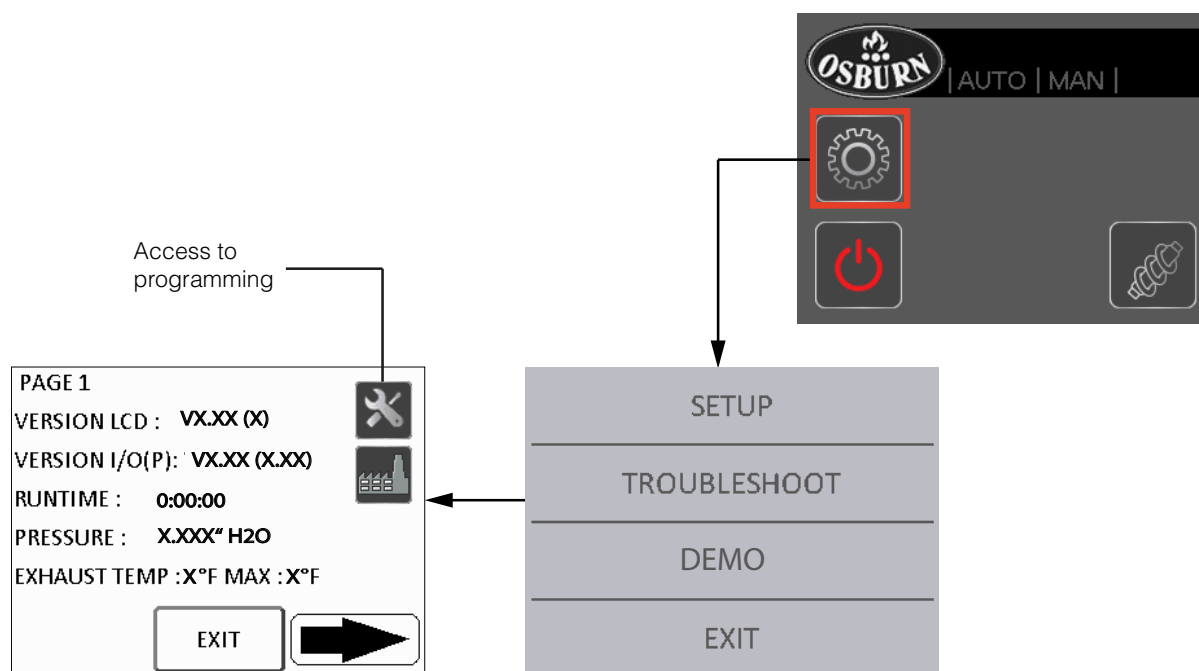
Electronic components (low power rated)

ELECTRONIC COMPONENTS (LOW POWER RATED)	ELECTRICAL COMPONENTS:
F160 (security heat sensor)	Igniter (heater)
L-250A (security heat sensor)	Combustion blower (will feed fire with fresh air)
Pressure sensor (security sensor)	Convection blower (will send hot air into the room)
Hopper switch (mechanical security sensor)	Exhaust blower (will extract combustion gas out of the stove)
RTD (temperature probe)	Auger motor 1 (located under the hopper)
Thermostat (temperature regulator device)	Auger motor 2 (will feed the fire with pellets)



WARNING: RISK OF ELECTRICAL SHOCK. IF YOU NEED TO MANUALLY TEST, MANIPULATE OR REPLACE ANY COMPONENTS, THE STOVE NEEDS TO BE DISCONNECTED FROM THE WALL OUTLET.

To validate the status of a component, you need to go to the “**TROUBLESHOOT**” page from the Main Status Page. Once there you will be able to navigate with the arrows through 7 different pages.



Page 1 provides information on the software version of the stove's two electronic cards. In addition, you have the total number of hours your stove has been in operation, the temperature of the exhaust gases and the maximum temperature that your stove has reached.

Pages 2 and 3 will give you statistics on the number of times a specific error code has occurred.

From page 4 is the list of operating states of the electronic components. If the square is green, it means that the operating state of the component is normal, no matter if it's on the left column or right. If the square is red, it means that the operating condition is abnormal. This screen will give you the operating status in real time, meaning that when the stove is running, if a state change occurs, you will see it immediately.

WITH GREEN ICONS			
PRESSURE			Pressure switch is closed. This condition is normal if the stove is in operation.
PRESSURE			Pressure switch is open. This condition is normal if the stove is OFF.
WITH RED ICONS			
PRESSURE			Pressure switch is closed. This condition is abnormal if the stove is OFF.
PRESSURE			Pressure switch is open. This condition is abnormal if the stove is in operation.

Testing Components

If you suspect an electrical component to be defective, you can test it from the “TROUBLESHOOT”



page. From the Main Status Page, press the Settings icon and choose “TROUBLESHOOT” in the menu. Page 5 and 6 will allow you to test every electrical component. Note that you will be able to test only components when the stove is OFF and that all the components are no more in function.

For example, if you press on the white square next to “GEAR MOTOR 1”, the auger 1 will turn for 30 seconds. This will give you the possibility to see the auger running and hear the motor running as well

PAGE 5

GEAR MOTOR 1	☐	☒
GEAR MOTOR 2	☒	☐
IGNITOR	☐	☒

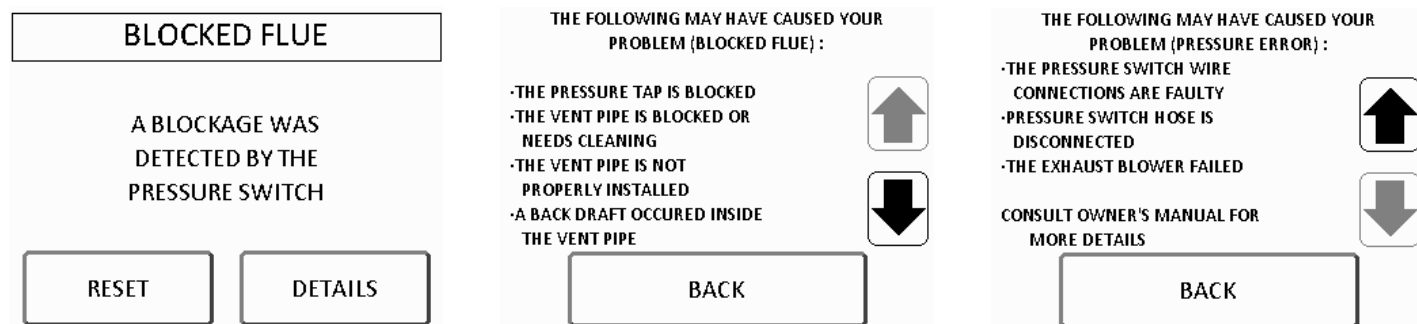
Main Error Codes, Possible Causes and Solutions

This section contains main error codes, possible causes and many suggestions to guide you in resolving them. After giving an error code, your stove will shut down by itself and start a cool down cycle. If you want to start your stove again, you will need to press on the «RESET» button and then on the “ON/OFF” button. Your stove will only restart when the cool down cycle is completed.

If, after performing all the possible solutions mentioned in the following section, you are still experiencing problems with your stove, call your local dealer or a service technician at **(418) 908-8002**. You can also write an email to: tech@sbi-international.com make sure to have the model of your stove and the serial number on hand. They can be found on the certification label inside the hopper lid.



RISK OF ELECTRICAL SHOCK. IF YOU NEED TO MANUALLY TEST, MANIPULATE OR REPLACE ANY COMPONENTS, THE STOVE NEEDS TO BE DISCONNECTED FROM THE WALL OUTLET.



Pressure tap (located on the exhaust blower) is blocked. Pull off the air hose from the exhaust blower pressure tap and from pressure sensor tap. **WARNING: THE TUBE MUST ABSOLUTELY BE DISCONNECTED FROM BOTH ENDS AS TO NOT DAMAGE THE PRESSURE SENSOR.** Blow in the air tube. If air flows freely, the hose is fine. If air does not flow through the hose, use a thin wire to clear the blockage.

The flue is blocked or needs cleaning. One of the following components is obstructed or blocked by ashes or by a foreign object; air intake shutter, combustion blower, burn pot, heat exchangers and exhaust channels, exhaust blower and or venting system. Refer to the maintenance section.

The flue is not properly installed. Make sure the venting system meets the criteria in the installation section of this manual as well as the venting system manufacturer's instructions.

A back draft occurred inside the flue. This can occur on a very windy day or if your venting system does not have a proper termination.

The pressure sensor wire connections are faulty or disconnected. Make sure that the pressure sensor telecommunication wire connections do not cause a short-circuit or are not loose. Replace or reconnect wires if necessary.

The pressure sensor hose is disconnected. Make sure the pressure sensor hose is well installed on the exhaust blower pressure tap and on the pressure. If not, reinstall it.

The exhaust or combustion blower failed. Go to the troubleshooting page on the LCD screen and test the exhaust and the combustion blowers independently (see section Testing Components). If one of them does not work, make sure there is power and that blowers are well connected. If they still don't work, check fuse F4 and F5 on the control board. A defective fuse will be darkened or will have a broken filament. If the fuses are good, the combustion or exhaust blower is probably defective. Replace the faulty part.

Pressure sensor is defective. Even if this is very rare, the pressure sensor could be defective. To test it, go to the troubleshooting page on the LCD (see section Testing Components). Start the exhaust blower. If the pressure switch square switches from the right column to the left column, it means the pressure sensor works. If not, the pressure sensor is defective and needs to be replaced.

NO FUEL

THE EXHAUST
TEMPERATURE INDICATES
THAT THERE IS NO FIRE IN
THE BURN POT

RESET

DETAILS

**THE FOLLOWING MAY HAVE CAUSED YOUR
PROBLEM (NO FUEL) :**

- THE STOVE RAN OUT OF PELLETS
- THE BURN POT HOLES ARE BLOCKED
- THE GEAR JAMMED
- THE GEAR MOTOR FAILED
- THE FLUE TEMPERATURE SENSOR FAILED

CONSULT OWNER'S MANUAL FOR
MORE DETAILS

BACK

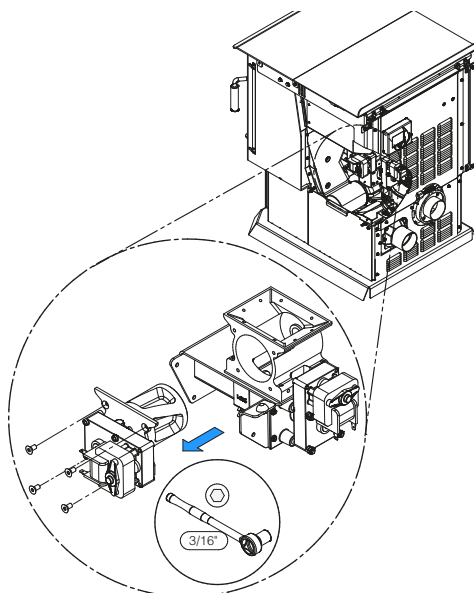
The stove ran out of pellets. Refill the hopper. Press “**RESET**” then “ON.”

The burn pot holes are blocked. Remove the burn pot and clean it thoroughly.

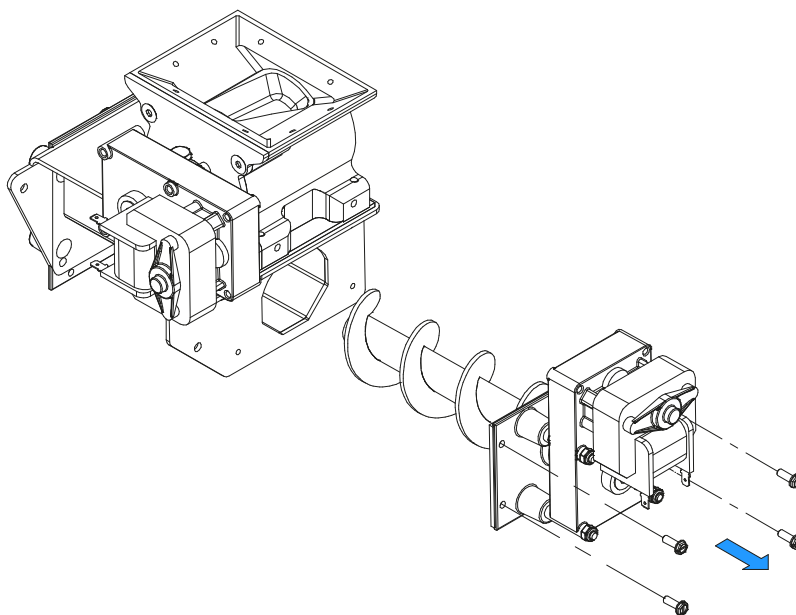
The auger is jammed or auger motor failed. Go to the troubleshooting page on the LCD (see section Testing Components) screen and test auger motors. If one of the motors is not running check if motor is defective or if the auger is jammed.

The flue temperature sensor failed. The exhaust temperature probe (RTD) is a heat sensor located on the exhaust housing. Its function is to tell the control board that the stove has ignited properly by measuring the heat at the exhaust. When the stove is cold, check page 1 in the “**TROUBLESHOOT**” menu if the temperature displayed on the line “**EXHAUST TEMP**” displays a value equal to the ambient temperature in the room where the appliance is installed. If this is the case, turn on the stove and check the same temperature display. If after 10 minutes, the value has not increased despite the unit is in operation this means that the temperature sensor is disconnected or defective. If the temperature rises, the problem may be with the feed rate or pilot mode. Depending on many factors (ambient temperature, pellet quality, etc) the heat produced by the stove may not be sufficient to keep the exhaust temperature high enough. To resolve the situation increase feed rate see section Combustion Settings and Pilot Settings depending on Fuel Quality.

HOPPER VALVE



BURN POT AUGER



NOTE: IF THE HOPPER AUGER MOTOR FAILED OR THE HOPPER VALVE IS JAMMED, TO AVOID PELLET SPILLAGE, EMPTY THE HOPPER OF ITS CONTENTS BEFORE EXECUTING THE FOLLOWING TESTS.

- If the auger motor is defective, check to make sure that electrical connections are not loose and check the fuses F2 and F6 on the control board. A defective fuse will be darkened or will have a broken filament. If the fuses are good, the auger motor may be jammed by an object.
- If the burn pot auger is jammed, remove it from its housing. Disconnect the motor and then remove the three screws on the steel plate that holds the auger shaft to the auger housing. To have an easier access, remove the rear panel for an easier access. Pull out the auger from the housing. Once the auger has been removed, make sure the auger is straight, that the surface is not damaged and there are no burrs, or broken welds. Remove any foreign material that may have caused the jam. Inspect the auger housing for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam. Clean the auger housing thoroughly to remove all pellet dust.
- If the hopper's rotary valve is jammed, empty the hopper's pellet contents completely to access the top of the rotary valve. Once accessible, make sure that no object, other than wood pellets, are found in the cavities of the rotary valve. Thereafter, if the rotary valve is still jammed pull it out from the housing. Disconnect the motor and then remove the four screws on the steel plate that holds the rotary valve to it's housing. To have an easier access, remove the rear panel for an easier access. Pull out the auger from the housing. Once the valve has been removed, make sure that the surface is not damaged and there are no burrs. Remove any foreign material that may have caused the jam. Inspect the valve housing for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam. Clean the valve housing thoroughly to remove all pellet dust.
- If no object appears to block the auger, reconnect the electrical connections of the motor and turn on the stove. **BE CAREFUL NOT TO TAKE AN ELECTRIC SHOCK.** Test the motor using the «TROUBLESHOOTING» mode.

Failed Ignition

FAILED IGNITION	
THE EXHAUST TEMPERATURE HAS NOT REACHED ITS START-UP VALUE AFTER TWO IGNITION ATTEMPTS	
RESET	DETAILS

THE FOLLOWING MAY HAVE CAUSED YOUR PROBLEM (FAILED IGNITION) :
•INADEQUATE FUEL IS USED •THE IGNITER IS DEFECTIVE •THE FLUE TEMPERATURE SENSOR FAILED
CONSULT OWNER'S MANUAL FOR MORE DETAILS
BACK

Inadequate fuel is used. Remove the burn pot, make sure that all openings are clear and check that no ash has filled the tube around the igniter. Refer to the maintenance section. Also, make sure that recommended fuel is used (see section Proper Fuel).

The igniter is defective. Go to the troubleshooting page (see section Testing Components) and follow instructions for component check. Test the igniter to see if it glows. It should take no longer than two minutes. If it does not glow red, check the wiring and the F3 fuse. If the wiring is properly connected and the fuse is good, disconnect the igniter and check its resistance (ohms, Ω) with a multimeter. If the value is near zero, replace the igniter.

The flue temperature sensor failed. The exhaust temperature probe (RTD) is a heat sensor located on the exhaust housing. Its function is to tell the control board that the stove has ignited properly by measuring the heat at the exhaust. When the stove is cold, check page 1 in the "TROUBLESHOOT" menu if the temperature displayed on the line "EXHAUST TEMP" displays a value equal to the ambient temperature in the room where the appliance is installed. If this is the case, turn on the stove and check the same temperature display. If after 10 minutes, the value has not increased despite the unit is in operation this means that the temperature sensor is disconnected or defective. If the temperature rises, the problem may be with the feed rate or pilot mode. Depending on many factors (ambient temperature, pellet quality, etc) the heat produced by the stove may not be sufficient to keep the exhaust temperature high enough. To resolve the situation increase feed rate (see section «Combustion Settings and Pilot Settings) depending on Fuel Quality».

Defective Igniter Fuse

IGNITER FUSE	
THE IGNITER FUSE OPENED	
RESET	DETAILS

THE FOLLOWING MAY HAVE CAUSED YOUR PROBLEM (IGNITER FUSE) :
•THE IGNITER IS DEFECTIVE •THE WIRING HARNESS SHORTED
CONSULT OWNER'S MANUAL FOR MORE DETAILS
BACK

The igniter is defective: Test the resistance (ohms, Ω) with a multimeter. If the value is near zero, replace the igniter and the F3 fuse.

The wiring harness shorted. Inspect the wiring and replace any defective wire and or connector. Make sure the wires are not shorted to the stove frame. Locate the fuse F3 on the control board and replace it. Go to the troubleshooting page (see section: Testing Components) and follow instructions for component check. Test the igniter to see if it glows. It should take no longer than two minutes.

Gear Fuse

GEAR FUSE	
THE GEAR FUSE OPENED	
RESET	DETAILS

THE FOLLOWING MAY HAVE CAUSED YOUR PROBLEM (GEAR FUSE) :

- THE GEAR JAMMED
- THE GEAR MOTOR IS DEFECTIVE
- THE WIRING HARNESS SHORTED

CONSULT OWNER'S MANUAL FOR MORE DETAILS

BACK

The rotary valve or auger is jammed or gear motor failed. Go to the troubleshooting page (see section Testing components) on the LCD screen and test both gear motors. If one of the motors is not running check if motor is defective or if the pot auger or rotary valve is jammed.

NOTE: IF THE HOPPER GEAR MOTOR FAILED OR THE ROTARY VALVE IS JAMMED, TO AVOID PELLET SPILLAGE, EMPTY THE HOPPER OF ITS CONTENTS BEFORE EXECUTING THE FOLLOWING TESTS.

- If the gear motor is defective, check to make sure that electrical connections are not loose and check the fuses F2 and F6 on the control board. If the fuses are good, remove the faulty gear motor from its auger housing and retest the motor separately still using the troubleshooting test mode. Make sure the hopper lid is closed. If the motor works, the auger may be jammed by a foreign object. If no signs of blockage are found, call your dealer or a service technician to perform a complete testing.
- If the pot auger is jammed, remove it from its housing see section «Auger replacement». Once the auger has been removed, make sure it is straight and there are no metal flaws, burrs, or broken welds. Remove any foreign material that may have caused the jam. Inspect the auger housing for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam. Clean the auger housing thoroughly to remove all pellet dust.
- If the hopper's rotary valve is jammed, empty the hopper's pellet contents completely to access the top of the rotary valve. Once accessible, make sure that no object, other than wood pellets, are found in the cavities of the rotary valve. Thereafter, before putting back wood pellets, close the hopper lid and go to the «TROUBLESHOOT» page of the LCD interface to test the gear motor 1. If the rotary valve does not seem to be stuck and the gear motor is working, contact your dealer or customer service to run a complete test.

The wiring harness shorted. Make sure the auger motor wiring is properly connected and not shorted.

Combustion Air Starvation

Venting system is dirty. Refer to «Maintenance» section.

The flue is not properly installed. Make certain the venting system meets the criteria in the installation section of this manual as well as the venting system manufacturer's instructions.

Inadequate fuel is used. Remove the burn pot, make sure that all openings are clear and check that no ash has filled the tube around the igniter. Refer to section: Maintenance. Also, make sure that recommended fuel is used and settings are adjusted to the type of pellets that are being used (see section: Adjusting the Combustion Level (Heat Output)).

Air intake channel is restricted. Visually inspect the air intake channel that leads to the burn pot for foreign material. Make sure that the air-intake shutter is functional and free of any obstruction.

The combustion/exhaust blower failed. Go to the troubleshooting page on the LCD screen and test the combustion and the exhaust blowers independently (see section: Testing Components). If one of them does not function, make sure there is power and that the blowers are properly connected. If they still don't work, check fuse F4 and F5 on the control board. A blown fuse will be darkened or will have a broken filament. If the fuses are in good condition, the combustion or exhaust blower is probably defective; Replace the faulty part.

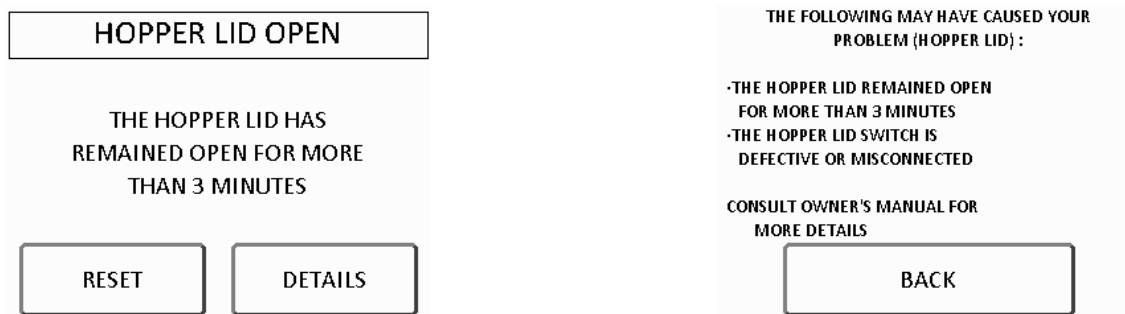
The LCD Touch Screen Does Not Lightup.

There is no electrical current going to the stove. Check if the stove is connected and if there is current in the wall outlet. Check if the F7 fuse is blown. Replace it if necessary.

TELCO wire is defective or not connected properly. Convection blower, combustion blower, exhaust blower and burn pot auger will start but the stove will beep continuously and the LCD touch screen will remain black. Check connection and change wire, if necessary.

The temperature of the screen is below zero. When the screen is exposed to temperatures too cold, the liquid crystals may not function properly which causes a loss of communication. This situation may occur in cases where the unit has arrived from outside by a carrier or is subjected to a room temperature too low as in an unheated cottage or a very cold garage.

Hopper Lid Open



The hopper lid remained open for more than 3 minutes. As a security measure, the auger stops turning and feeding pellets as soon as the hopper lid opens. It will resume normal operation as soon as the hopper lid is closed. If the hopper lid stays open for more than 3 minutes, the stove will stop.

The hopper lid safety switch is faulty or disconnected. Make sure that the switch wiring is properly connected. If it is, the hopper switch may be faulty. Follow steps in the troubleshooting page (see section Testing Components) and verify the proper function of the safety switch. Replace if necessary.

Power Loss

POWER LOSS POWER WAS INTERRUPTED WHILE BURNING FOR MORE THAN 15 SECONDS RESET DETAILS	THE FOLLOWING MAY HAVE CAUSED YOUR PROBLEM (POWER LOSS) : •MAIN FUSE ON I/O MODULE OPENED •CIRCUIT BREAKER FEED OPENED •MAIN POWER LOST CONSULT OWNER'S MANUAL FOR MORE DETAILS BACK
--	---

Power was interrupted while the stove was functioning. After the cool down cycle, the stove will restart using the last settings. Press “**RESET**” to go back to the Main Status Page.

NOTE: For a short power failure (less than 5 seconds), the stove will continue to function at the selected speed.

Unit Overheat

The main cause of overheating of the device is the lack of maintenance. Any overheating code should be followed by a thorough maintenance of the unit and a check of the vent system.

The overheating code could also appear if the firepot or firewall is not installed properly, or if the convection blower is defective.

After **THREE** repetitions of an overheating code, it will not be possible to restart the device.



Before unlocking, make the suggested two-year maintenance in the maintenance schedule. Thoroughly inspect the vent system. Have it swept, if necessary.

UNIT OVERHEAT 1 AN OVERHEAT ZONE WAS DETECTED ON THE GEAR HOUSING RESET DETAILS	THE FOLLOWING MAY HAVE CAUSED YOUR PROBLEM (OVERHEAT) : •INADEQUATE FUEL IS USED •THE FLUE IS NOT PROPERLY INSTALLED •THE FLUE IS BLOCKED OR NEEDS CLEANING •THE STOVE NEEDS MAINTENANCE ↑ ↓ BACK	THE FOLLOWING MAY HAVE CAUSED YOUR PROBLEM (OVERHEAT) : •THE COMBUSTION CHAMBER IS NOT AIR TIGHT •THE CONVECTION BLOWER FAILED ↑ ↓ CONSULT OWNER'S MANUAL FOR MORE DETAILS BACK
--	---	--

Inadequate fuel is used. Remove the burn pot, make sure that all openings are clear and check that no ash has filled the tube around the igniter. Refer to the maintenance section. Also, make sure that the recommended fuel is used (see section: Proper Fuel).

The flue is not properly installed. Make sure the venting system meets the criteria in the section: «Venting System» as well as the venting system manufacturer's instructions.

The flue is blocked or needs cleaning. One of the following components is obstructed or blocked; air intake shutter, combustion blower, burn pot, heat exchangers and channels, exhaust blower and or venting system. Refer to section: Maintenance.

The stove needs maintenance. Refer to section: Maintenance.

The burn pot is not installed properly. Make sure the burn pot is installed correctly (see section: Cleaning the Burn Pot).

The baffle is not installed properly or holes may be blocked. Make sure the baffle is well installed and the lock is in place. Make sure the holes are clear. (see section: Cleaning the Baffle, the Heat Exchanger and the Combustion Chamber).

The convection blower is defective. Go to the troubleshooting page on the LCD screen and test the convection blower (see section: Testing Components).

The convection blower needs maintenance. Carefully clean blower housing and make sure blower louvers are not blocked.

NOTE: IF THE CODE APPEARS MORE THAN THREE TIMES, THE LCD SCREEN WILL LOCK ITSELF UP.



BEFORE RESETTING THE PC-BOARD DISPLAYING AN ERROR CODE, DO A COMPLETE STOVE MAINTENANCE AS DESCRIBED IN THIS MANUAL.



NOTE: THIS PELLET STOVE IS EQUIPED WITH MULTIPLE DEVICES TO ENSURE YOUR SAFETY. IF A WARNING ERROR CODE STOPS YOUR STOVE ON SEVERAL OCCASIONS, IT IS MORE THAN LIKELY THAT THE STOVE DOES NOT EXHAUST PROPERLY.

Once the maintenance done, follow these instructions

After 3 attempts, press restart

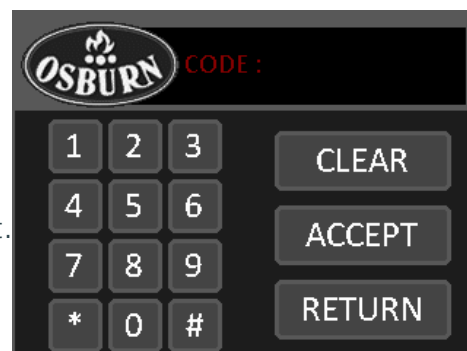
UNIT OVERHEAT 4

- SECURITY LOCK -
THIS IS THE THIRD TIME THAT
AN OVERHEAT ZONE HAS
BEEN DETECTED ON THE
GEAR HOUSING

RESET

DETAILS

and then enter the following code 999333555 and press accept.
The system will reset.



Smoke Smell

Venting system leaks. Inspect all vent connections. This is a pressurized venting system. All vent connector joints must be sealed and fastened in accordance with the pellet vent manufacturer's instructions to ensure consistent performance and avoid smoke and ash spillage (see section Installation Warnings, Cautions and Recommendations Reminder).

Worn gaskets. Gaskets may be allowing smoke spillage (doors, clean out traps, etc). Make sure that all gaskets are in good condition and replace them with original parts if necessary. Make sure the door is well adjusted (see section: Door Adjustment).

Negative pressure. A faint wood-burning odor during ignition or shut down is normal. Although, if this increases beyond what is considered normal or if you notice an unusual soot build-up on walls or furniture, check your venting system carefully for leaks and make sure all gaskets are in good condition. The stove exhaust blower produces a negative pressure in the room. It draws air from the inside of the room, through the stove and then outdoors. In the same manner, other appliances can also create a larger negative pressure. In this case, as the air naturally flows from a high pressure point to a low pressure point, a larger negative pressure can draw smoke from the inside of the stove into the room. The stove can also be affected by other mechanical ventilation systems, causing the same effect as mentioned previously. Using a fresh air intake will prevent negative pressure (see section: Combustion Air supply). Also, make sure the recommended maintenance schedule has been followed