

AGP (All Grade Pellet) Troubleshooting Guide

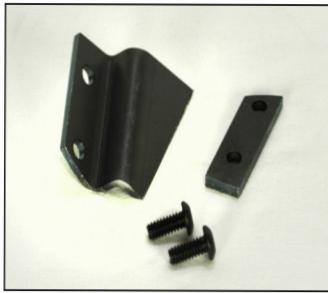
Document 176-01795



TRAVIS INDUSTRIES
HOUSE OF FIRE

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Travis Industries Certified Factory Training Program



Chisel
250-02605



Control Board
(Stove)
250-02622

Control Board
(Insert)
250-02818



Convection Blower
250-00588



Exhaust Blower
250-02610

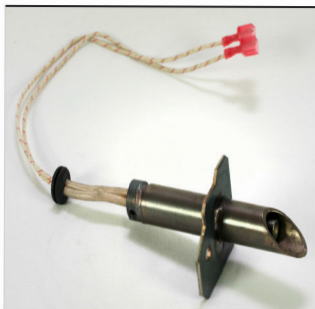


Flow Switch
90-0791



Metering Motor
(Motor Only)
(High Torque)
250-02828

Metering Motor
Retro-Fit Kit
250-02797
(Incl: motor, bracket, chisel)

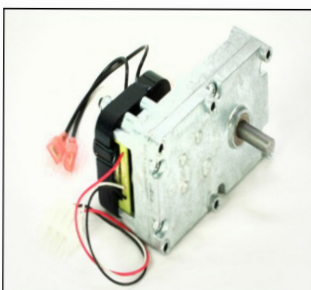


Igniter
250-02613



System Disc (Ceramic)
(Disc Only)
250-02966

System Disc Retro-Fit Kit
(for older stoves)
250-03193



Push Motor W/Encoder
250-02598



Snap Disc
(Hopper or Safety)
250-00314

AGP™ Pellet Troubleshooting

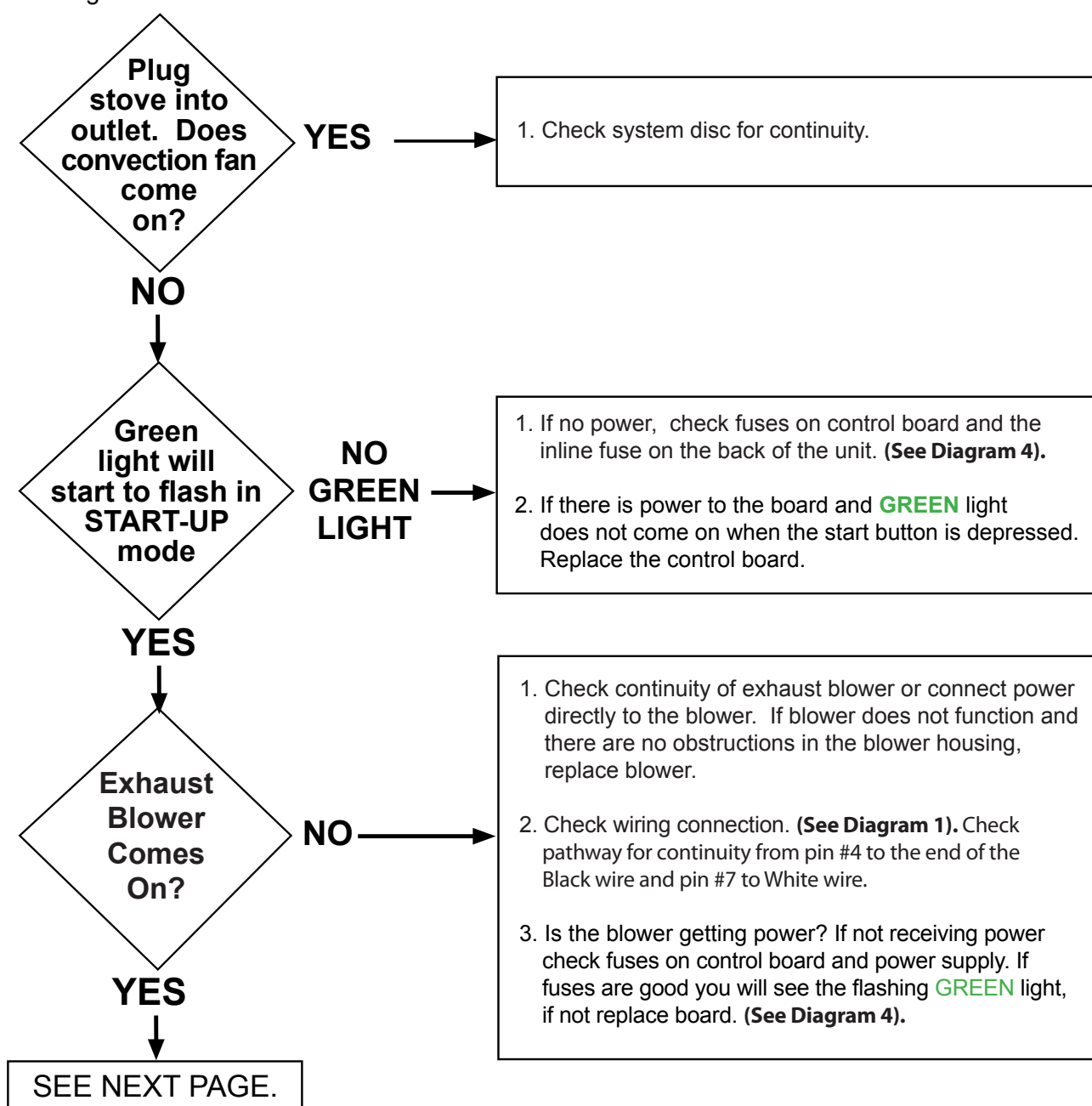
The unit has been programmed to evacuate smoke in case of a power failure. When 110V is introduced to the unit the exhaust fan will start and operate approximately 15 minutes, and the **RED** stop light will illuminate.

To START Manually

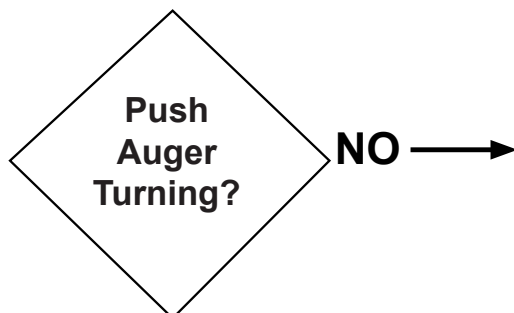
IF CONTROL BOARD IS FLASHING EITHER A **RED LIGHT** OR **BLUE LIGHT**, OR HAS CONSTANT **RED** AND **GREEN**, REFER TO DIAGNOSTIC CHART.

Press the START button on the control panel. The stove will enter the start-up sequence for approximately 22 min.

- 1. Green light will start to flash in start up mode.
- 2. Exhaust blower will come on.
- 3. Push Auger will turn.
- 4. Meter System will turn.
- 5. Pellets will start to feed the system.
- 6. Igniter will come on.



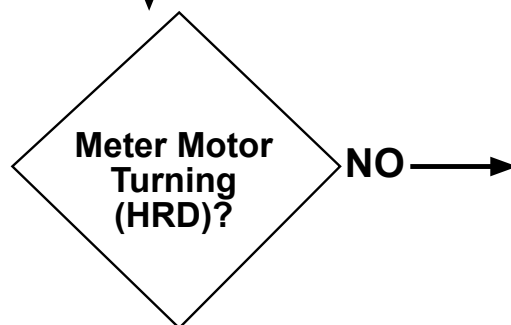
AGP™ Pellet Troubleshooting



Push
Auger
Turning?

NO →

YES



Meter Motor
Turning
(HRD)?

NO →

YES

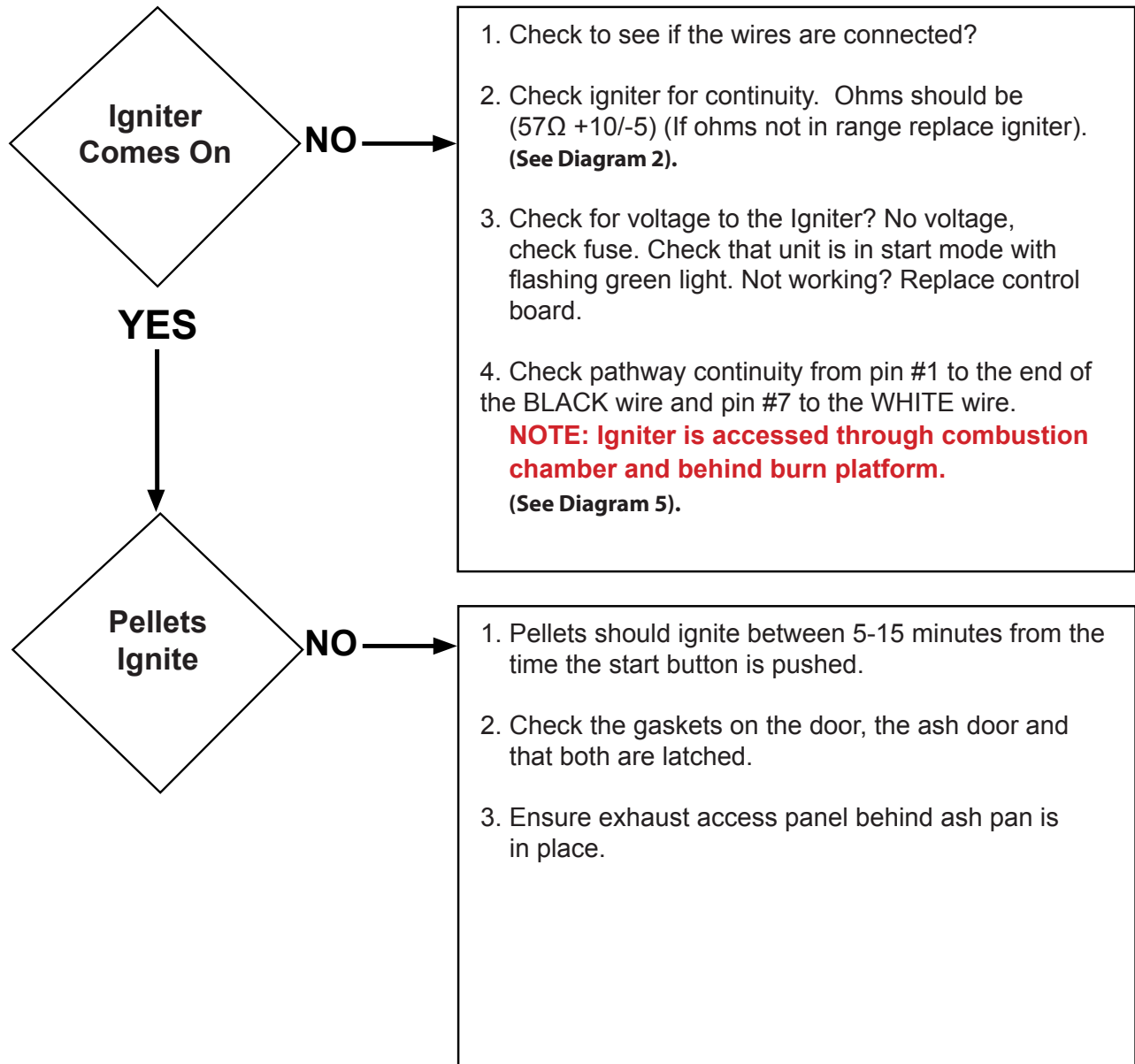
SEE NEXT PAGE.

1. Check vacuum and brass barb tube for blockage, kinks, or cracks.
2. Check flow switch for continuity. No continuity through flow switch when actuated, replace flow switch.
3. Check continuity of motor.
4. Check jumper wire between flow switch and push auger for continuity. Check continuity from pin #7 to White wire. If no continuity replace wiring.
5. Check for power to motor, this should be a constant power supply (**See Diagram 2**).
6. Connect power direct to motor to determine if operational. If not turning replace motor.
7. Check auger flight for jam.
8. If the flow switch is good and still no power to motor, replace control board.

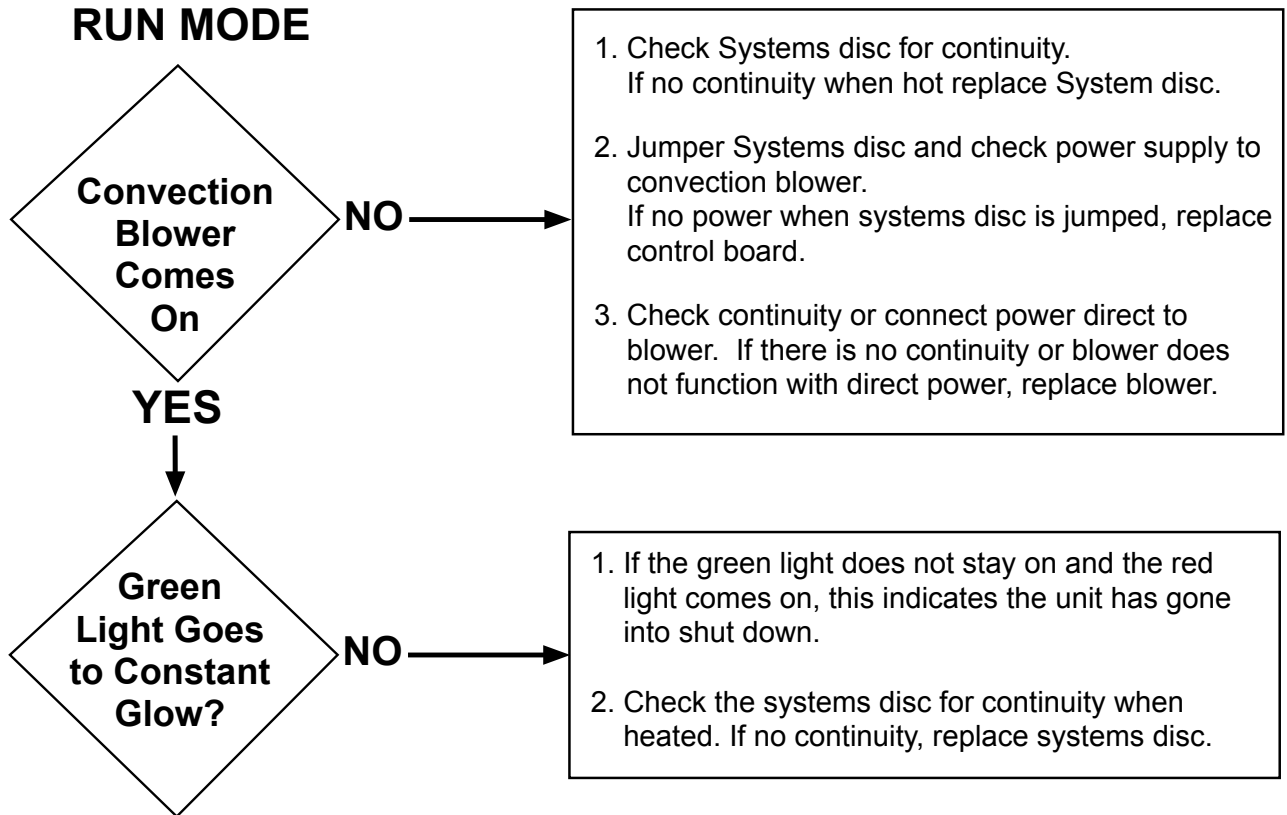
1. Push auger must be operational for meter motor to operate.
2. Is the Start light flashing?
3. Are there pellets in the hopper?
4. If push auger is turning and Stop light on control board is flashing, Check encoder for proper voltage to and from control board and if Molex is connected to the control board. (**See Diagram 3**). Check continuity of metering motor.
5. Check for power to the meter motor, this will be an intermittent power supply. (**See Diagram 2**).
6. Is hopper lid closed and lid switch actuated?
7. Connect power direct to motor to determine if operational. (If slight movements check for jam)
8. Check Hopper lid switch for continuity.
9. Check Horizontal Rotating Disc (HRD) assembly for fouling or jam.
10. Check pathway (with hopper CLOSED) from pin #6 to the end of the RED wire pin #7 to WHITE wire.
11. Check to see if encoder molex is plugged in at board.
12. Remove pellets from the hopper; disconnect metering motor to determine if HRD is spinning freely.

NOTE: Do not use a wrench or socket drive on 7/16" retaining bolt on HRD to free a jam. Serious damage can occur or bolt can be broken. If this happens the stove must be returned for repair.

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SHUT DOWN MODE

Press the STOP button on the control panel. The stove will begin the shut-down process, which takes approximately 45 minutes.

1. The metering auger will stop feeding pellets, but the push auger stays running.
2. **When the unit gets cool the convection blower will shut off while the combustion blower stays running for another 15 minutes.**
3. The unit is now off and waiting to be started.

THERMOSTAT MODE

Tstat calls for heat.

1. Unit will go into start mode. Unit will start same as manually.
See manual start.

The stove will enter the start-up sequence for approximately 22 min.
See manual start.

Changing the TSTAT Program

This heater comes with three TSTAT programs built in. Each program is unique and allows you to modify your thermostat setting to your preference. The stove is shipped pre-programmed in TSTAT program 1.

How to Tell Which TSTAT Program You Are In

When you press the “STOP” and “TSTAT” button simultaneously while the unit is cold the blue Auto-Fan LED light will flash. It will flash once for Program 1, twice for Program 2, and three times for Program 3. Flashes are quick.

Switching Between Program 1, 2, and 3

Each time you press the “STOP” and “TSTAT” button simultaneously while the unit is cold, the TSTAT program will toggle to the next program. Continue to press these two buttons until the blue Auto-Fan LED light flashes the program you wish to use.

Thermostat Program 1

When the thermostat stops calling for heat (the thermostat is open) the feed rate “steps down” to a lower heat setting. The heater will stay at this setting for 15 minutes. If the thermostat does not call for heat, the feed rate will “step down” again to a lower setting (or off).

At any time if the thermostat calls for heat (thermostat is closed) during this cycle, the heater will resume at the HEAT output setting set at the control board.

If it switches to off and there is a call for heat it will switch to start up mode for the 22 min. cycle before returning to its board setting.

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THERMOSTAT MODE

Heater Set at <u>HIGH</u>	If thermostat calls for heat (<u>thermostat closed</u>) Heater runs at setting set on control panel dial.	If thermostat stops calling for heat (<u>thermostat open</u>) Heater goes to MEDIUM. If after 15 minutes thermostat still open, heater goes to MEDIUM-LOW. If after 15 minutes thermostat still open, heater goes to LOW. If after 15 minutes thermostat still open, heater turns off.
Heater Set at <u>MEDIUM</u>	If thermostat calls for heat (<u>thermostat closed</u>) Heater runs at setting set on control panel dial.	If thermostat stops calling for heat (<u>thermostat open</u>) Heater goes to MEDIUM-LOW. If after 15 minutes thermostat still open, heater goes to LOW. If after 15 minutes thermostat still open, heater turns off.
Heater Set at <u>MEDIUM-LOW</u>	If thermostat calls for heat (<u>thermostat closed</u>) Heater runs at setting set on control panel dial.	If thermostat stops calling for heat (<u>thermostat open</u>) Heater goes to LOW. If after 15 minutes thermostat still open, heater turns off.
Heater Set at <u>LOW</u>	If thermostat calls for heat (<u>thermostat closed</u>) Heater runs at setting set on control panel dial.	If thermostat stops calling for heat (<u>thermostat open</u>) Heater will run for 15 minutes. If thermostat still open, heater turns off.

THERMOSTAT PROGRAM 2

In Thermostat Mode Program 2 when the thermostat stops calling for heat (the thermostat is open) the following happens:

The burn rate decreases to Level 1 (low) for 15 minutes. If there is no call for heat during that time...

The unit turns off. If there is a call for heat by the thermostat (the thermostat is closed) at any point during this cool-down period then the burn rate resumes corresponding with the setting on the control panel.

THERMOSTAT PROGRAM 3

In Thermostat Mode Program 3 when the thermostat stops calling for heat (the thermostat is open) the following happens:

The burn rate decreases to Level 1 (low) and remains at this level until there is a call for heat by the thermostat (the thermostat is closed), then resumes corresponding with the setting on the control panel.

Run mode. Same as manual mode.

Shut Down. Same as manual mode.

AGP™ Pellet Troubleshooting



Troubleshooting Table

Lights on the control panel will flash when a fault has occurred. Follow the steps below to diagnose the problem before calling customer service.

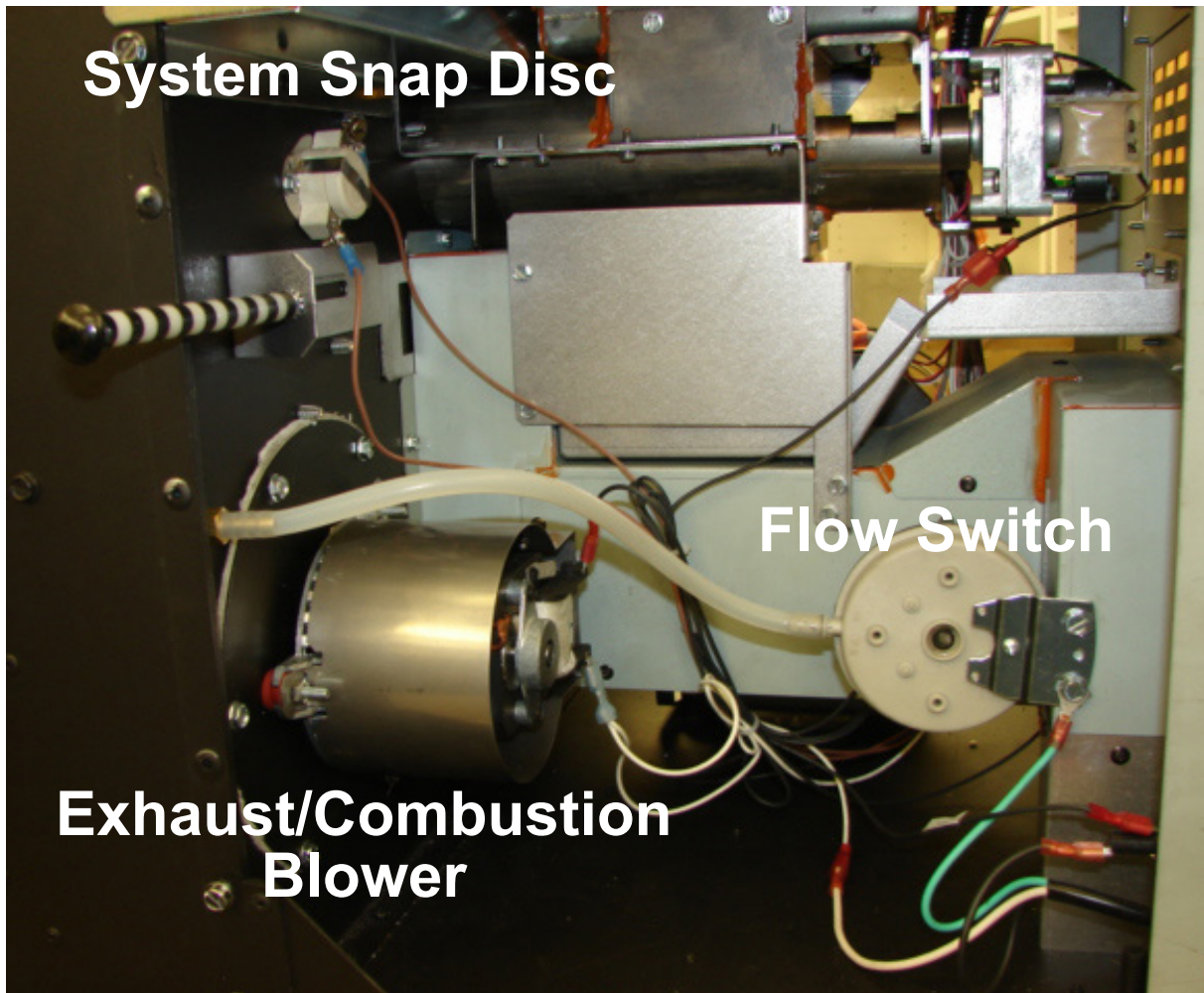
Diagnostic Codes

Diagnostic Code:	Possible Cause:	Don't Call for Service Until You:
Red "STOP" light flashes.	A failed combustion blower, pressure switch, or push auger can cause this error.	Press the START button again to try to ignite the stove.
The red "STOP" and green "START" light are on simultaneously	Two consecutive startup attempts have failed.	Check the pellet level in the hopper and verify there are pellets. Clean the burn pot.
Blue "AUTO FAN" light is flashing	One of the safety disks has tripped and the unit has entered a safety shutdown mode.	Hold the "STOP" button for 3 seconds. Make sure the stove is clean and free of ash and debris, and that the room air blower functions and is clean.

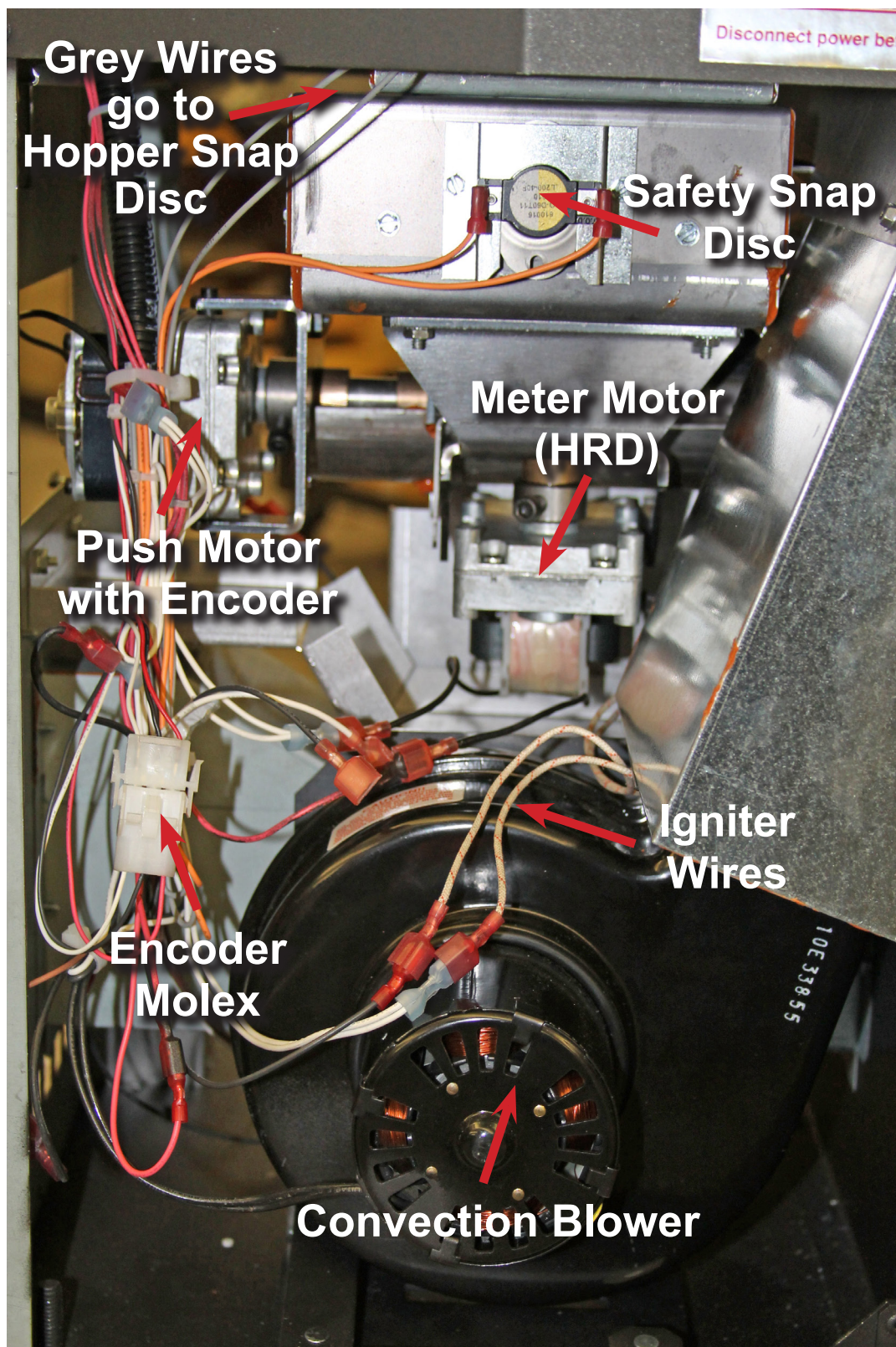
NOTE: Always check to make sure pellets are in the hopper.

NOTE: Always check the fire platform for build-up and clean away any debris that may have accumulated.

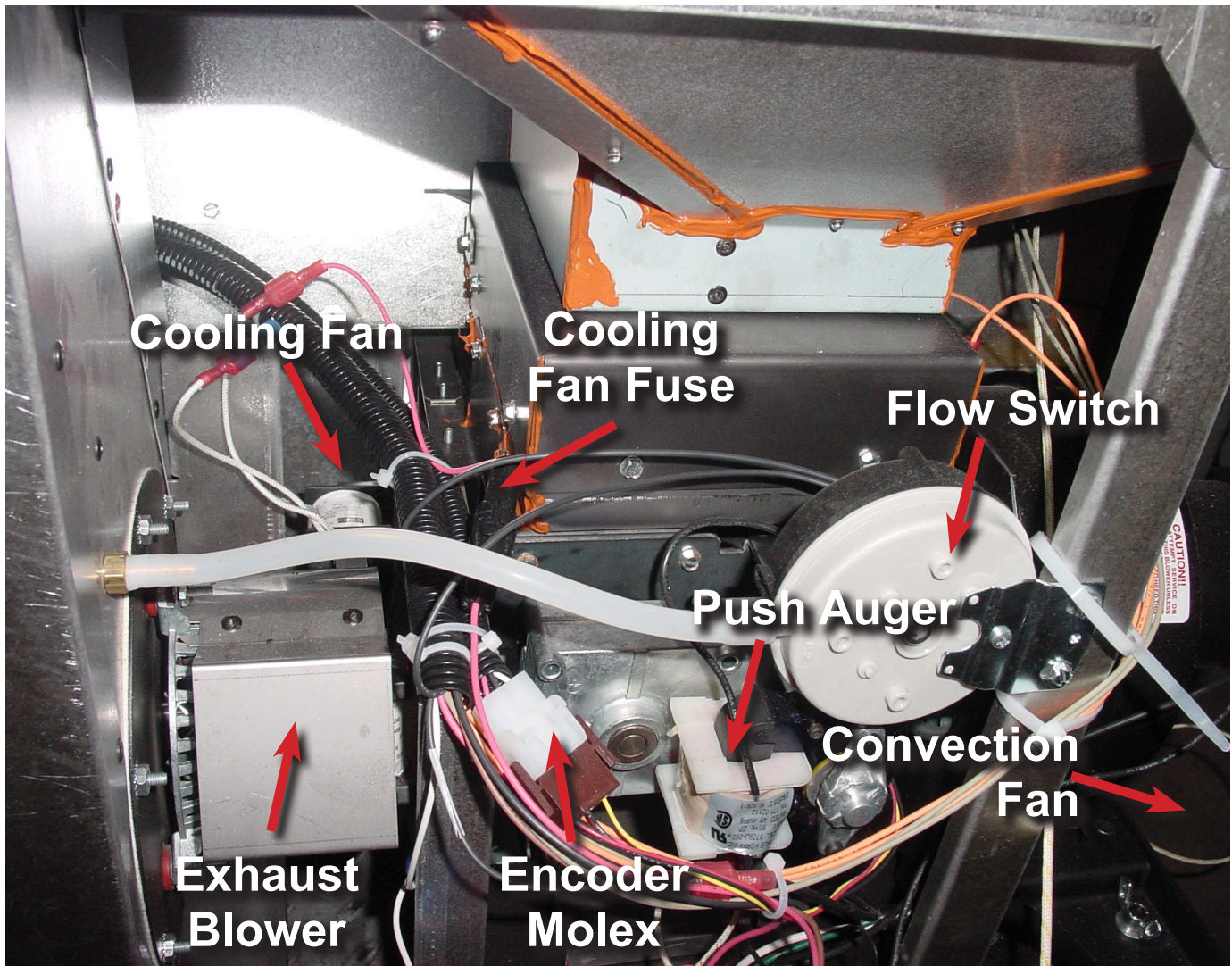
Stove - Diagram 1



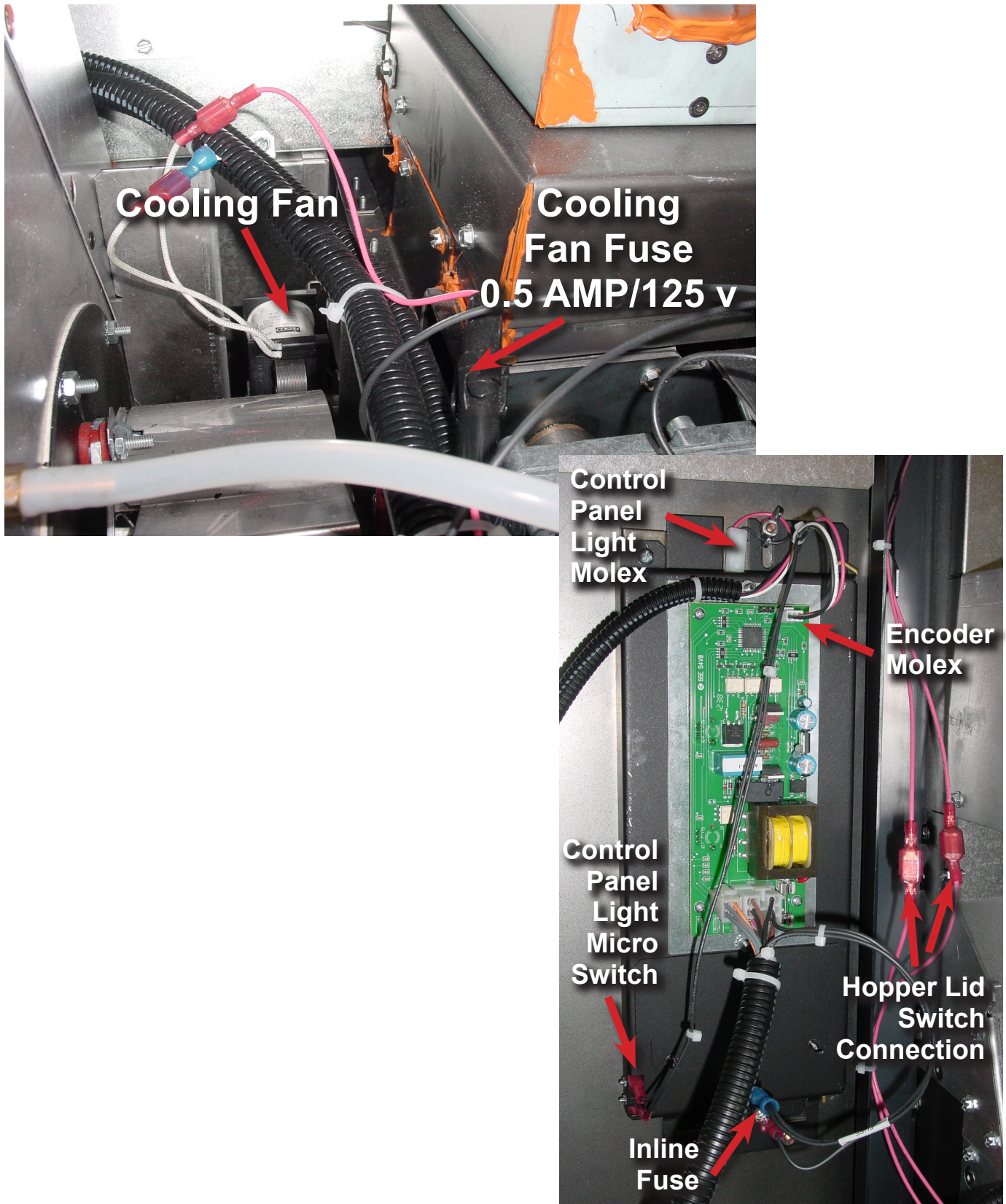
Stove - Diagram 2



INSERT - Diagram 1



Insert - Diagram 2



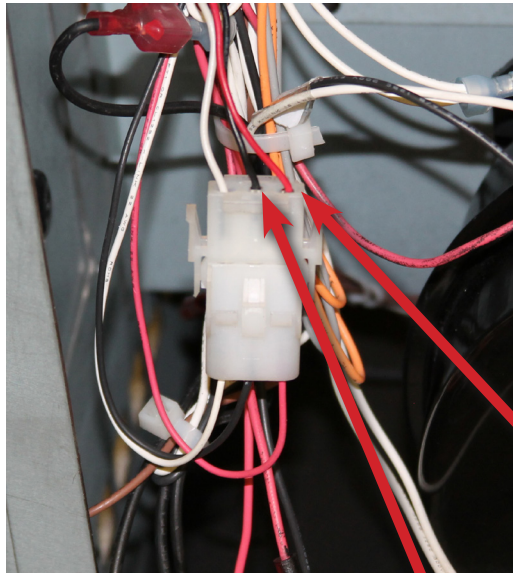


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Diagram 3 - Encoder Voltage Test

Take measurements from the Molex Connector (either side)



Voltage DC

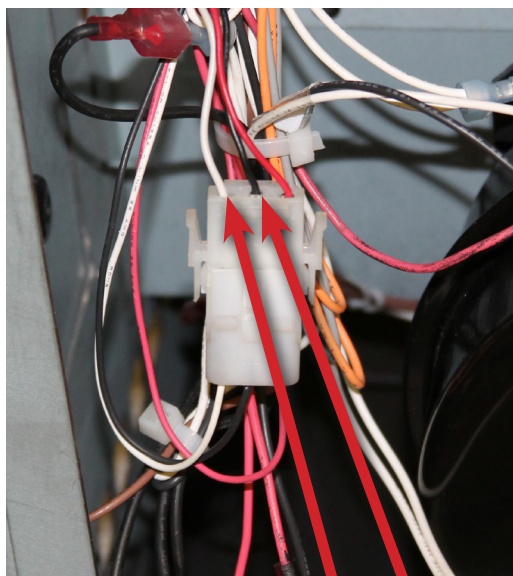


5 VDC

**Set To
DCV**

To Red and
Black Wires

If no power check molex connection at control board. If good replace control board.



Voltage DC



2.5 VDC

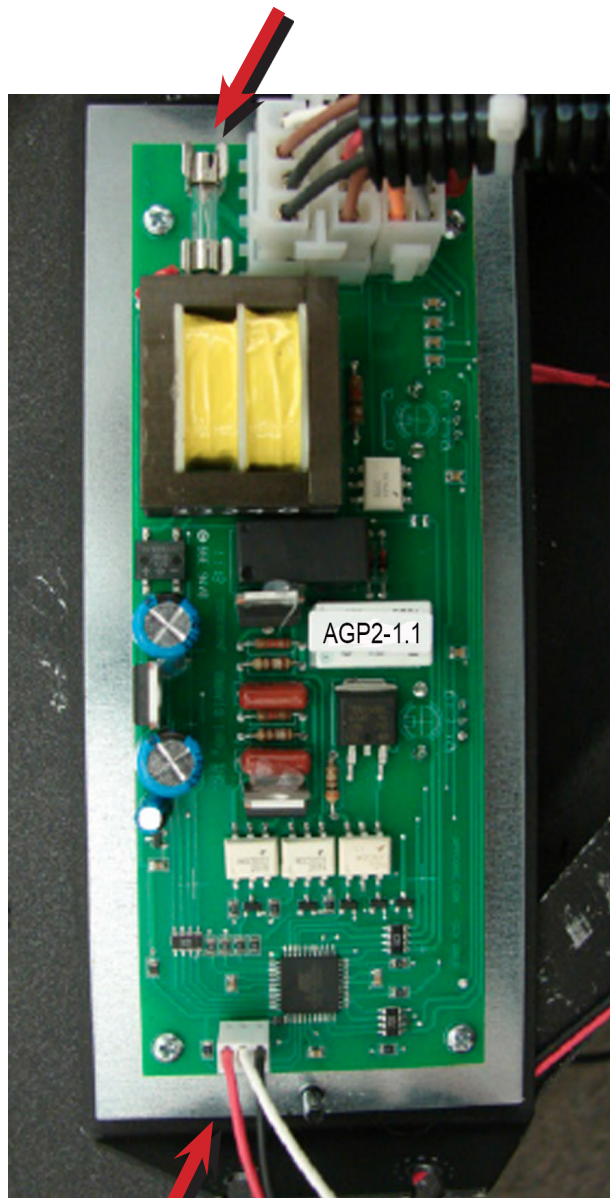
**Set To
DCV**

To White and
Black Wires

If not 2.5 VDC and you are reading 5 VDC through the RED and BLACK wires, replace the Pusher Auger.

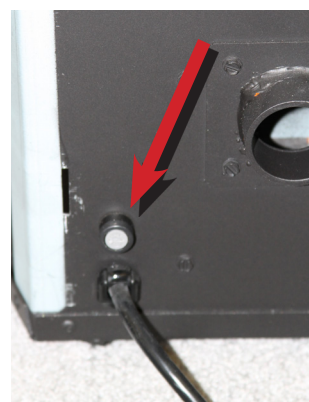
Diagram 4

5amp/125v Fuse



Encoder Molex

STOVE
5amp/250v Fuse



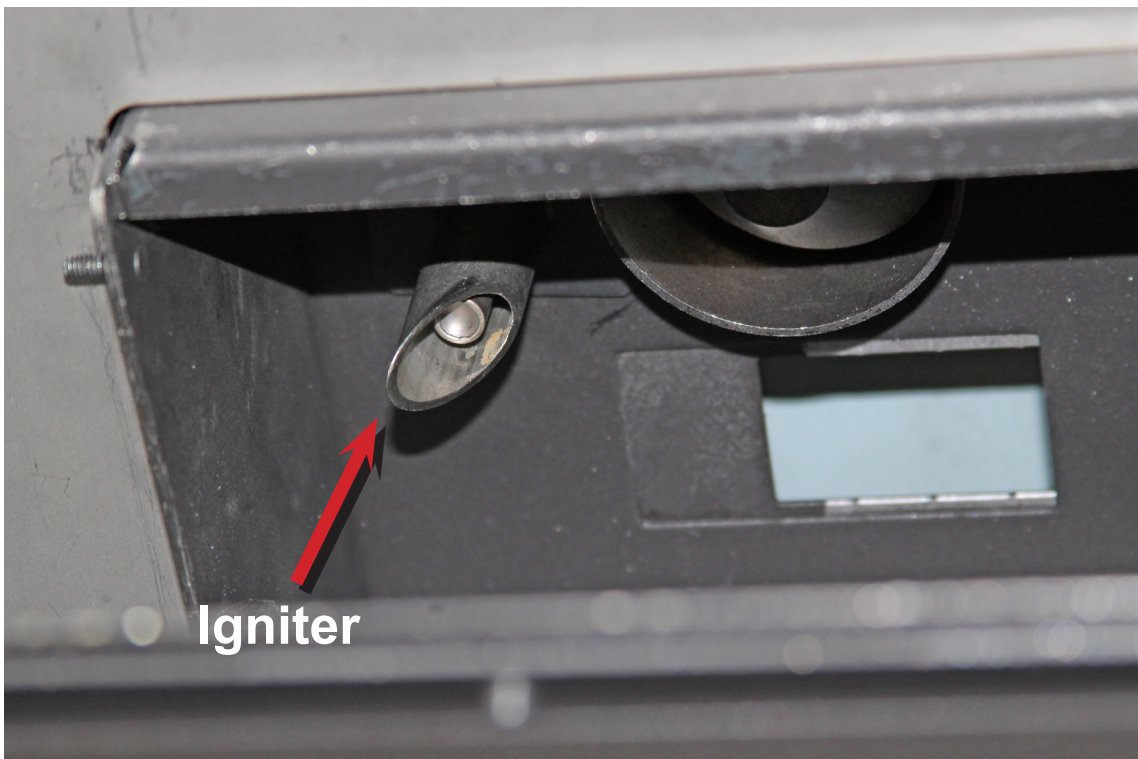
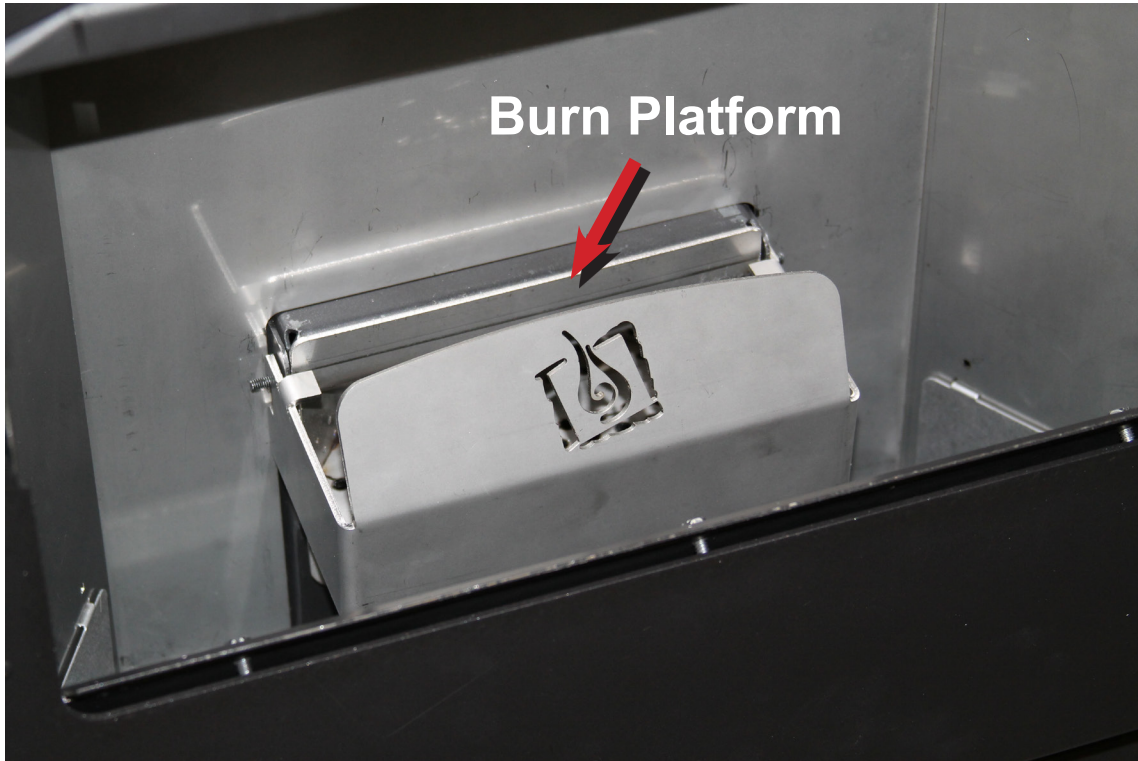
Back Of Unit

INSERT
5amp/250v Fuse

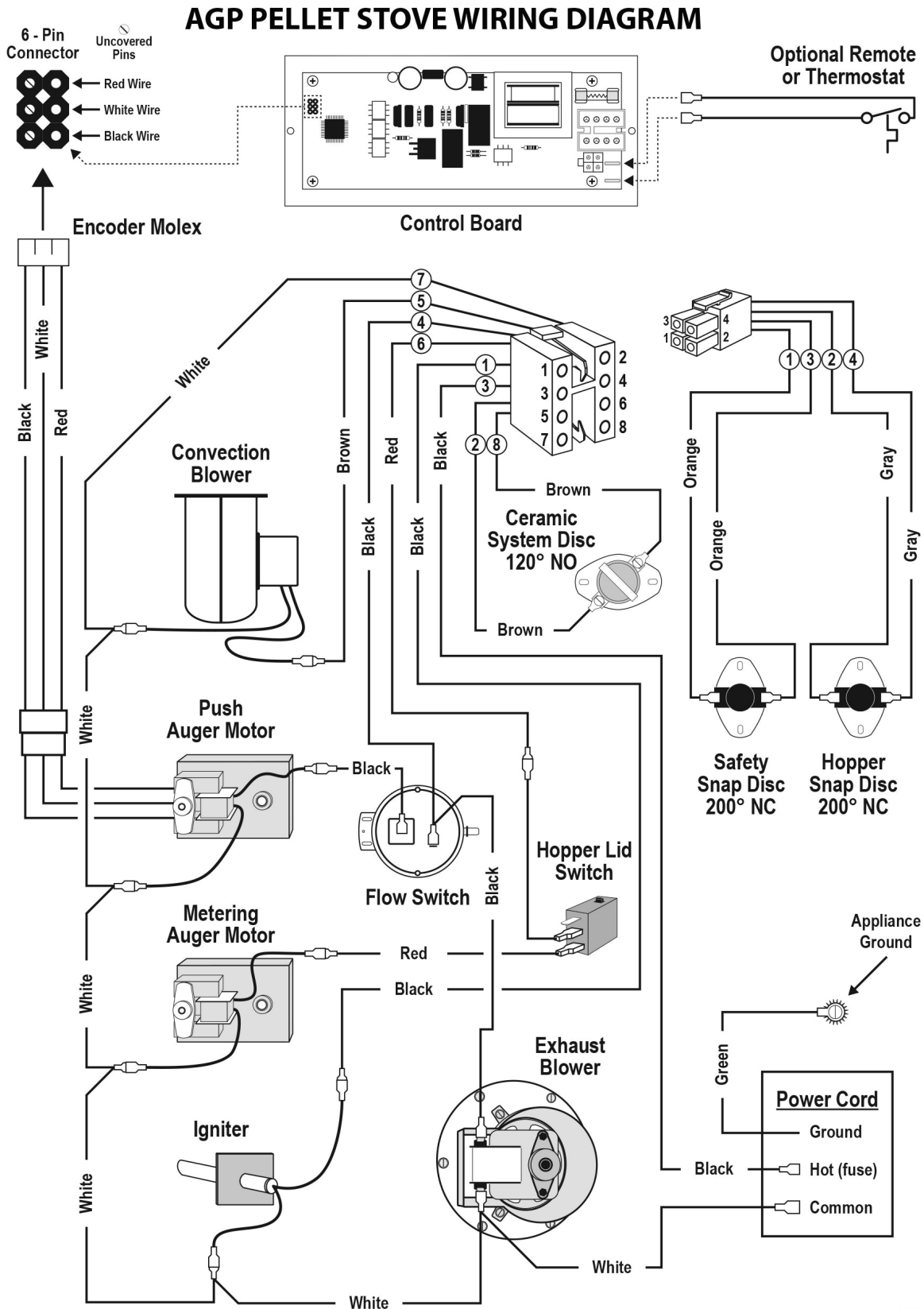


Bottom of
Control Board

Diagram 5 - Ignitor



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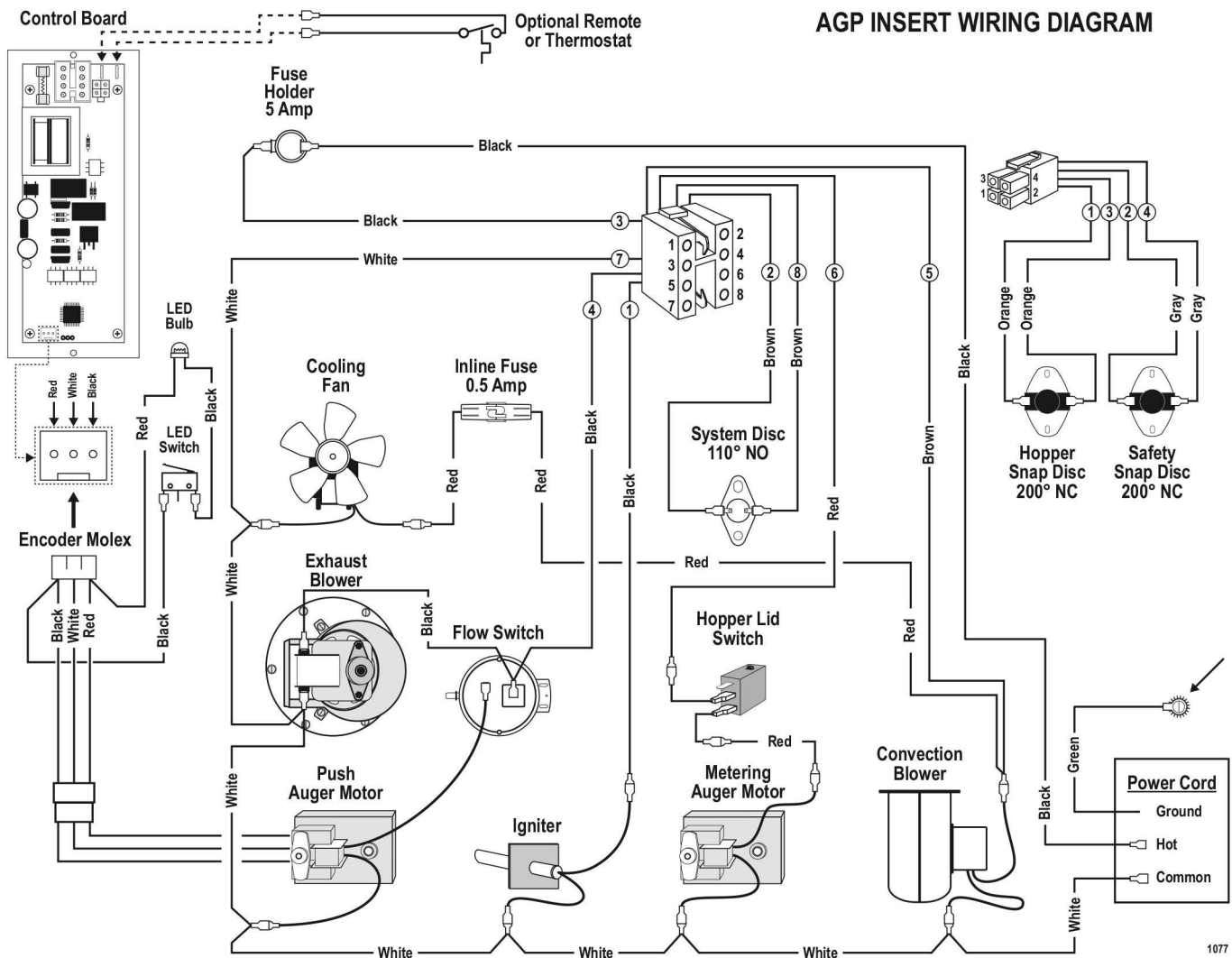


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Wiring Diagram AGP™ Pellet Insert



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