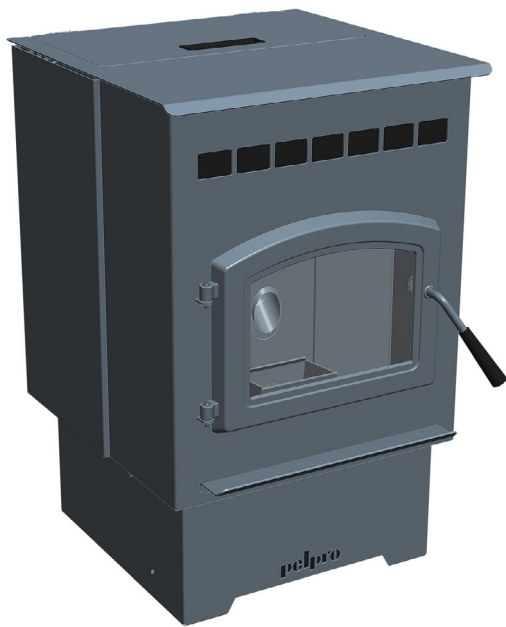




# SERVICE MANUAL

## PP60 / PP60-B / PP70 / PP130 / PP130-B



# PELPRO TROUBLESHOOTING MANUAL

## INTRODUCTION

The purpose of this troubleshooting guide is to provide step by step procedures for diagnosing issues with the PelPRO PP60, PP60-B, PP70, PP130, PP130-B. A digital or analog multimeter will be required for many of the troubleshooting steps in this guide.

When troubleshooting with the multimeter, it's important to disconnect the appliance from wall power while locating the electrical connections that need to be checked. Connect the multimeter to the test locations detailed in this guide and then plug the appliance back into wall power. Take care to avoid letting any exposed wires or connectors from contacting the metal chassis of the appliance or from touching exposed skin. The appliance is energized with 115VAC power from the wall and there is a risk of shock or electrocution. If you are not familiar or comfortable working with energized electrical circuits, please contact a certified NFI Installer or certified electrician to complete that portion of troubleshooting.

When instructed to check a appliance for power from the control board, the multimeter will need to be set to check Voltage, often displayed as "V" on the meter. If the meter is not auto-sensing, AC voltage will need to be chosen when specified in the instructions. AC voltage is also sometimes shown as ~ V on multimeters. If instructed to check VDC, DC voltage will have to be chosen on the multimeter. Voltage checks are typically used when motors and blowers are not running and we are attempting to determine if the component is bad or if the control board is not sending power to the component.

Some components can be verified for functionality by checking the resistance of the part. Igniters and fuses are the most common parts that can be verified by resistance checking with a multimeter. Resistance is measured in ohms ( $\Omega$ ) and most multimeters will have that symbol next to the resistance setting. Unlike voltage, resistance is always measured with the appliance completely deenergized from wall power. There is no risk of shock or electrocution when the appliance is unplugged from wall power and components are being verified for resistance. When resistance is being checked, this manual will provide an expected resistance in  $\Omega$ , however a number slightly above or below the specified value does not indicate a bad component. If the multimeter shows MAX or Out of Range, this indicates infinite resistance, meaning an open circuit and a bad component. A resistance of 0 ohms for a component indicates an electric short circuit and again a bad component.

# Service Parts List

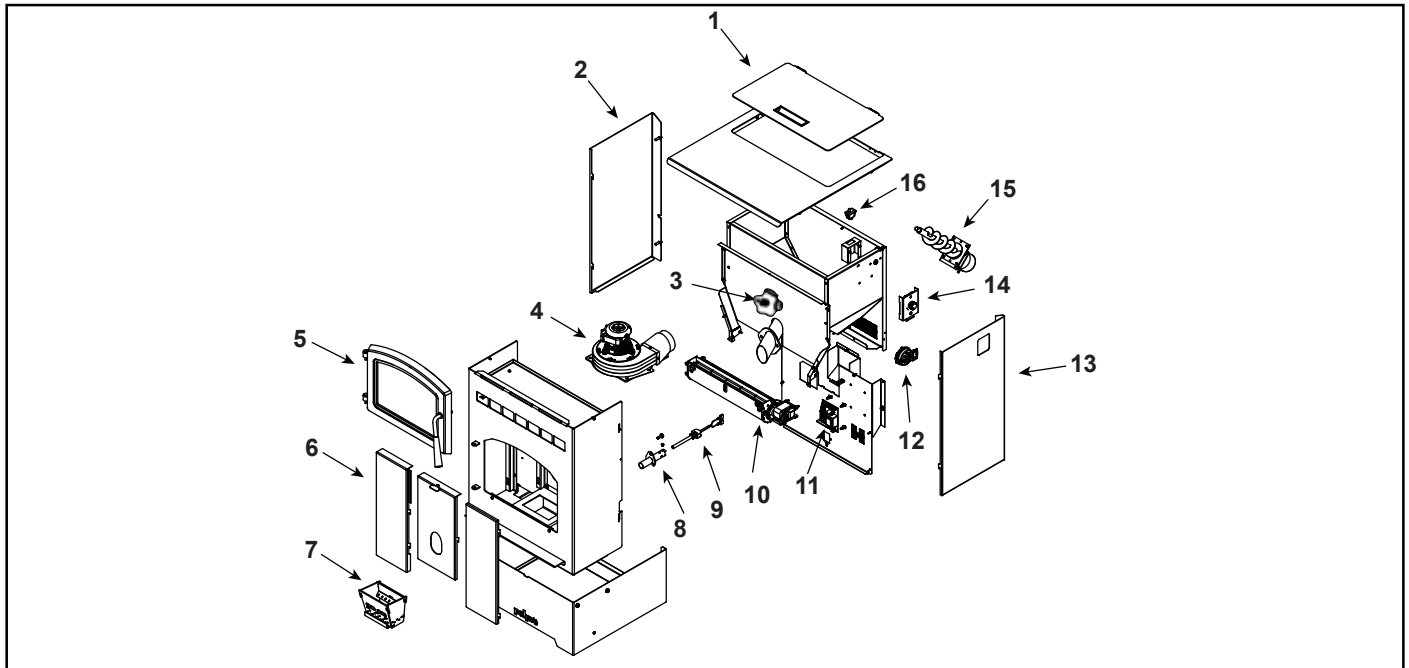


## Service Parts

**PP60**

Pellet Stove

Beginning Manufacturing Date: July 2013  
Ending Manufacturing Date: Active



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number.



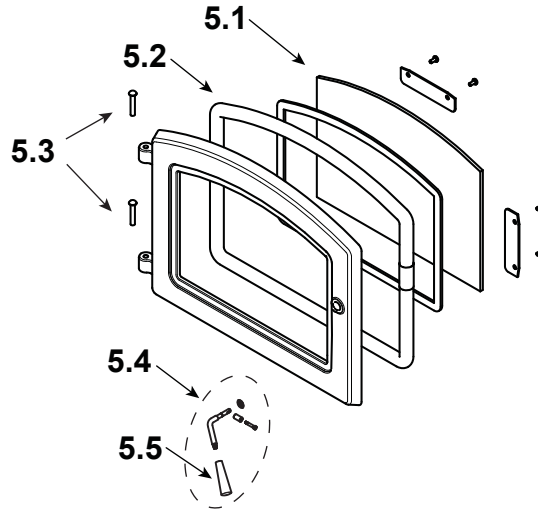
**Stocked at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Hopper Lid Assembly		SRV7083-019	
	Handle, Hopper Lid		SRV200-0110	
2	Side Curtain, Left Hand		SRV7083-154	Y
3	Snap disc, Manual Reset		SRV230-0080	Y
4	Exhaust Combustion Blower		812-4400	Y
	Gasket, Between Blower Housing and Stove		SRV240-0812	Y
	Gasket, Between Blower Housing and Motor		812-4710	Y
5	Door Assembly		SRV7086-021	Y
6	Baffle Kit		SRV7079-006	
7	Firepot		SRV7077-003	Y
8	Igniter Chamber Kit		SRV7077-110	
9	Igniter Kit		SRV7000-660	Y
10	Convection Blower		SRV7000-659	Y
11	Control Board		SRV7079-050	Y
12	Vacuum Switch		SRV7000-531	Y
	Vacuum Hose, 5/32 ID	3 Ft	SRV240-0450	Y
13	Side Curtain, Right Hand		SRV7083-153	Y
14	Dial Control		SRV7083-036	Y
	Wire Harness, Dial Control		SRV7000-667	Y
15	Feed Assembly Kit		SRV7077-014	Y
16	Hopper Switch		SRV7000-612	Y

See Following page for additional service parts

6/18

#5 Door Assembly



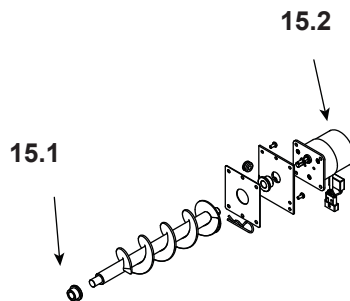
IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number.



Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
5	Door Assembly		SRV7086-021	Y
5.1	Glass Assembly		SRV7081-173	Y
5.2	Rope, Door, 3/4" x 84"		832-1680	Y
5.3	Hinge Pins	Pkg of 2	433-1590/2	Y
5.4	Threaded Handle Assembly Kit		SRV7093-024	Y
5.5	Handle Black Phenolic Kit		KS-5140-1442	Y

#15 Feeder Assembly



15	Feed Assembly Kit		SRV7077-014	Y
15.1	Feed Shaft Bushing	Pkg of 2	7000-600/2	Y
15.2	Feed Motor		SRV7000-670	Y
	Bearing Assembly		SRV7000-820	
	Ambient Probe		SRV7000-668	Y
	Exhaust Probe		SRV7000-669	Y
	Wire Harness		SRV7093-184	Y
	Wire Clip	Pkg of 10	7000-400/10	Y
	Power Cord		812-1180	Y

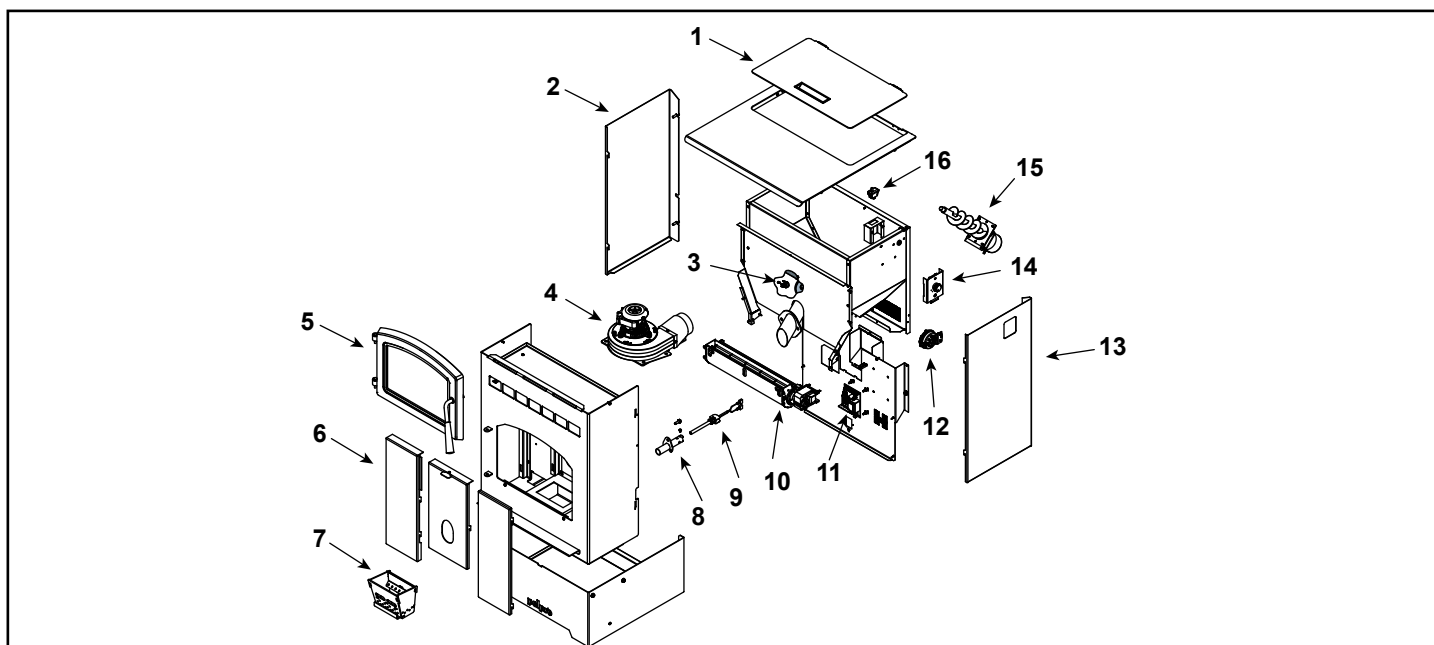


## Service Parts

# PP60-B

Pellet Stove

Beginning Manufacturing Date: April 2019  
Ending Manufacturing Date: Active



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number.



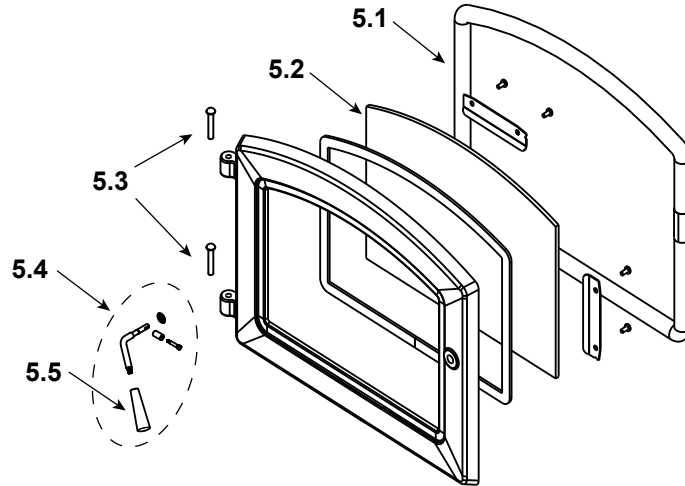
**Stocked  
at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Hopper Lid Assembly		SRV7083-019	
	Handle, Hopper Lid		SRV200-0110	
2	Side Curtain, Left Hand		SRV7083-154	Y
3	Snap disc, Manual Reset		SRV230-0080	Y
4	Exhaust Combustion Blower		812-4400	Y
	Gasket, Between Blower Housing and Stove		SRV240-0812	Y
	Gasket, Between Blower Housing and Motor		812-4710	Y
5	Door Assembly		<b>See Following Page</b>	Y
6	Baffle Kit		SRV7079-006	
7	Firepot		SRV7077-003	Y
8	Igniter Chamber Kit		SRV7077-110	
9	Igniter Kit		SRV7000-660	Y
10	Convection Blower		SRV7000-659	Y
11	Control Board		SRV7079-050	Y
12	Vacuum Switch		SRV7000-531	Y
	Vacuum Hose, 5/32 ID	3 Ft	SRV240-0450	Y
	Hose, Barb Assembly		SRV229-0920	
13	Side Curtain, Right Hand		SRV7083-153	Y
14	Dial Control		SRV7083-036	Y
	Wire Harness, Dial Control		SRV7000-667	Y
15	Feed Assembly Kit		<b>See Following Page</b>	Y
16	Hopper Switch		SRV7000-612	Y

See Following page for additional service parts

6/21

#5 Door Assembly



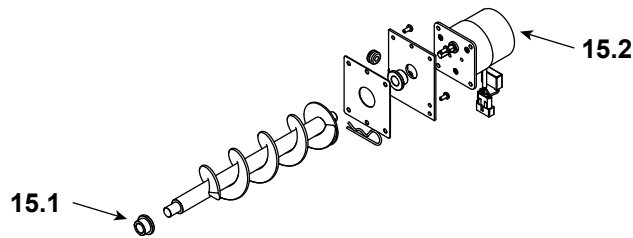
IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number.



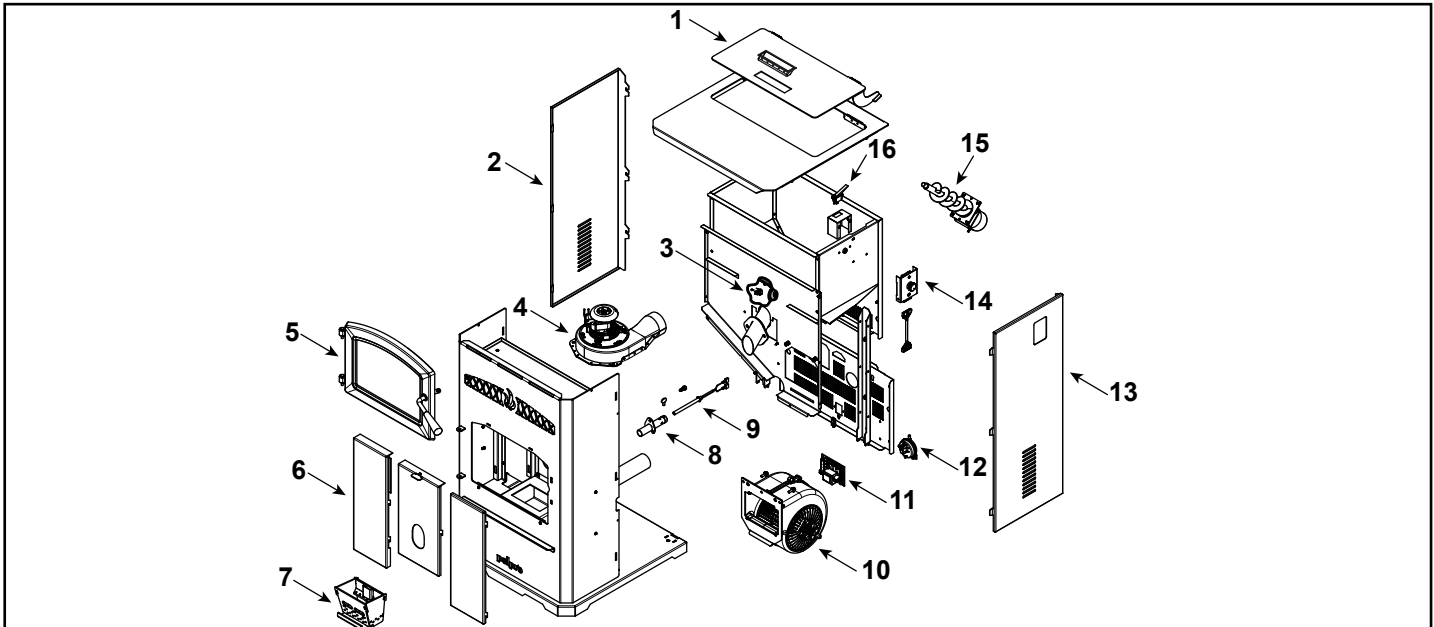
Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
5	Door Assembly		SRV7086-021	Y
5.1	Rope, Door, 3/4" x 84"		832-1680	Y
5.2	Glass Assembly		SRV7081-173	Y
5.3	Hinge Pins	Pkg of 2	433-1590/2	Y
5.4	Threaded Handle Assembly Kit		SRV7093-024D	Y
	Shoulder Bolt, 1/4 x 1	No longer available	SRV7000-944	
5.5	Handle Black Phenolic Kit		KS-5140-1442	Y

#15 Feeder Assembly



15	Feed Assembly Kit		SRV7077-014	Y
15.1	Feed Shaft Bushing	Pkg of 2	7000-600/2	Y
15.2	Feed Motor		SRV7000-670	Y
	Bearing Assembly		SRV7000-820	
	Ambient Probe		SRV7000-668	Y
	Exhaust Probe		SRV7000-669	Y
	Wire Harness		SRV7093-184	Y
	Wire Clip	Pkg of 10	7000-400/10	Y
	Component Pack		SRV7083-062	
	Power Cord		812-1180	Y



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number.



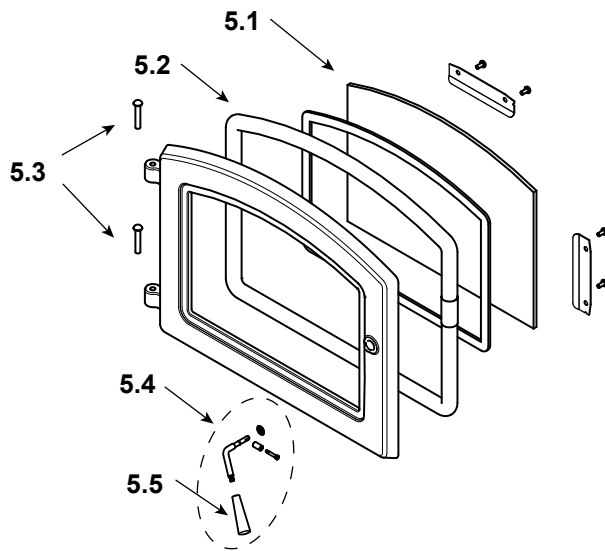
**Stocked at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Hopper Lid Assembly		SRV7103-019	
	Handle, Hopper Lid		SRV200-0110	
2	Side Curtain, Left Hand		SRV7103-154	Y
3	Snap disc, Manual Reset		SRV230-0080	Y
4	Exhaust Combustion Blower		812-4400	Y
	Gasket, Between Blower Housing and Stove		SRV240-0812	Y
	Gasket, Between Blower Housing and Motor		812-4710	Y
5	Door Assembly		SRV7086-021	Y
6	Baffle Kit		SRV7079-006	
7	Firepot		SRV7077-003	Y
8	Igniter Chamber Kit		SRV7077-110	
9	Igniter Kit		SRV7000-660	Y
10	Convection Blower		KS-5020-1052	Y
	Convection Blower Gasket		SRV7081-195	
11	Control Board		SRV7103-050	Y
12	Vacuum Switch		SRV7000-531	Y
	Vacuum Hose, 5/32 ID	3 Ft	SRV240-0450	Y
	Hose, Barb Assembly		SRV229-0920	
13	Side Curtain, Right Hand		SRV7103-153	Y
14	Dial Control		SRV7083-036	Y
	Wire Harness, Dial Control		SRV7000-667	Y
15	Feed Assembly Kit		SRV7077-014	Y
16	Hopper Switch		SRV7000-612	Y

See Following page for additional service parts

6/21

#5 Door Assembly



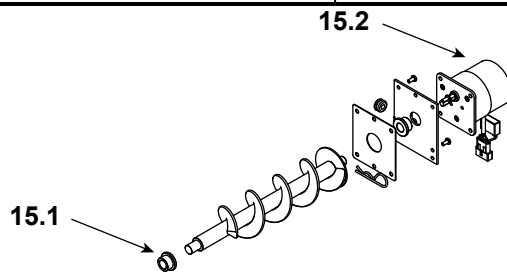
IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number.



Stocked at Depot

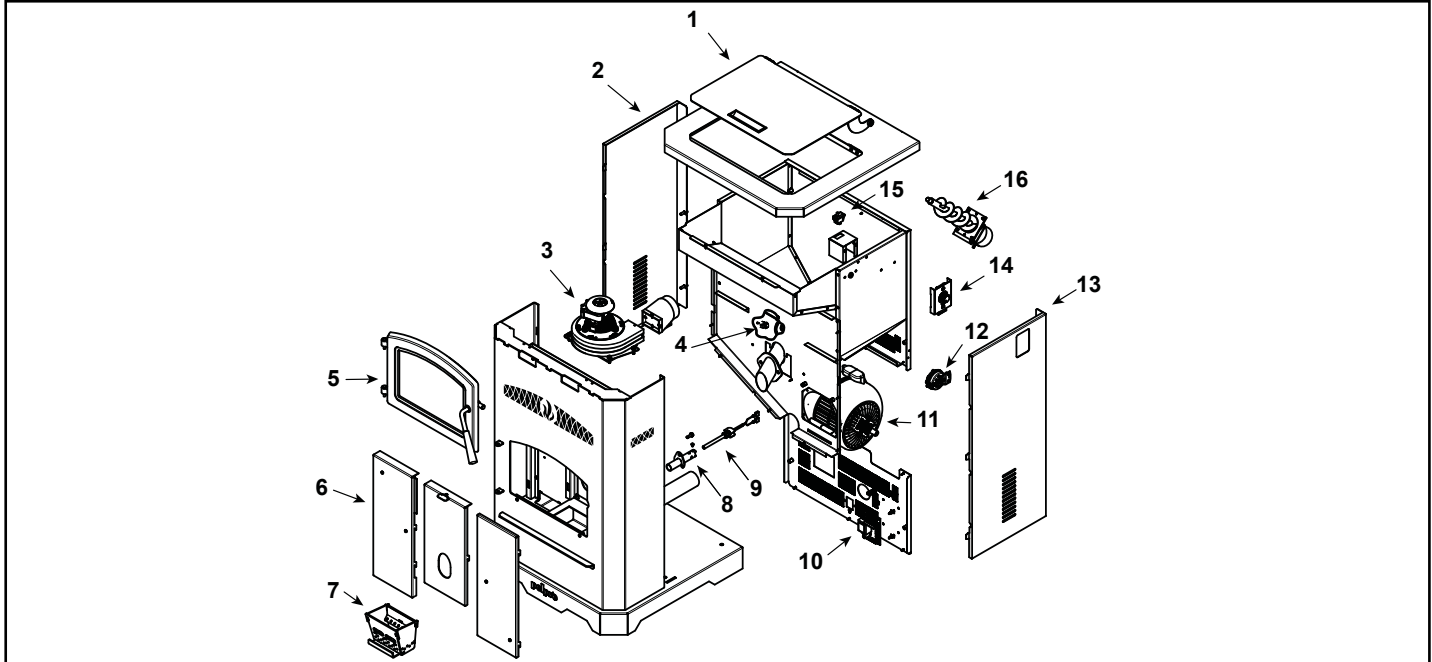
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
5	Door Assembly		SRV7086-021	Y
5.1	Glass Assembly		SRV7081-173	Y
5.2	Rope, Door, 3/4" x 84"		832-1680	Y
5.3	Hinge Pins	Pkg of 2	433-1590/2	Y
5.4	Threaded Handle Assembly Kit		SRV7093-024D	Y
	Shoulder Bolt, 1/4 x 1	No longer available	SRV7000-944	
5.5	Handle Black Phenolic Kit		KS-5140-1442	Y

#15 Feeder Assembly



15	Feed Assembly Kit		SRV7077-014	Y
15.1	Feed Shaft Bushing	Pkg of 2	7000-600/2	Y
15.2	Feed Motor		SRV7000-670	Y
	Bearing Assembly		SRV7000-820	
	Ambient Probe		SRV7000-668	Y
	Component Pack		SRV7103-028	
	Exhaust Probe		SRV7000-669	Y
	Wire Harness		SRV7093-184	Y
	Wire Clip	Pkg of 10	7000-400/10	Y
	Power Cord		812-1180	Y





IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual must be ordered from a dealer.



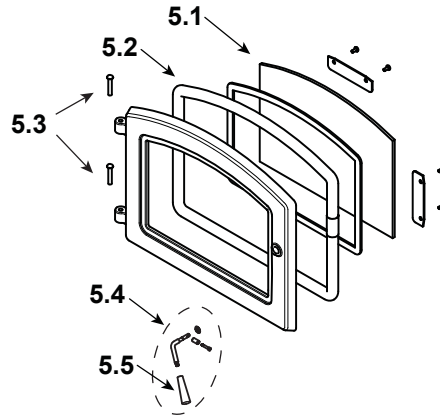
Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Hopper Lid Assembly		SRV7086-019	
	Hopper Extension		PPHE200	
	Handle, Hopper Lid		SRV200-0110	
2	Side Curtain, Left Hand		SRV7086-154	
3	Exhaust Combustion Blower		812-4400	Y
	Gasket, Between Blower Housing and Stove		SRV240-0812	Y
	Gasket, Between Blower Housing and Motor		812-4710	Y
4	Snap disc, Manual Reset		SRV230-0080	Y
5	Door Assembly		SRV7086-021	Y
6	Baffle Kit		SRV7077-006	
7	Firepot		SRV7077-003	Y
8	Igniter Chamber Kit		SRV7077-110	
9	Igniter Kit		SRV7000-660	Y
10	Control Board		SRV7077-050	Y
11	Convection Blower		KS-5020-1052	Y
	Convection Blower Bracket		SRV7081-210	
12	Vacuum Switch		SRV7000-531	Y
	Vacuum Hose, 5/32 ID	3 Ft	SRV240-0450	Y
13	Side Curtain, Right Hand		SRV7086-153	Y
14	Dial Control		SRV7083-036	Y
	Wire Harness, Dial Control		SRV7000-667	Y
15	Hopper Switch		SRV7000-612	Y

See Following page for additional service parts

6/18

#5 Door Assembly



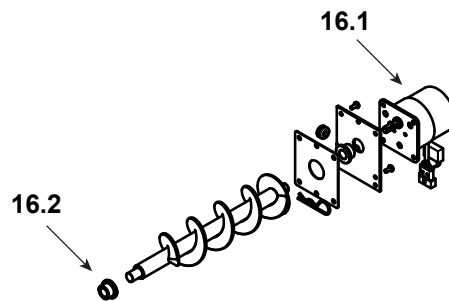
IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual must be ordered from a dealer.



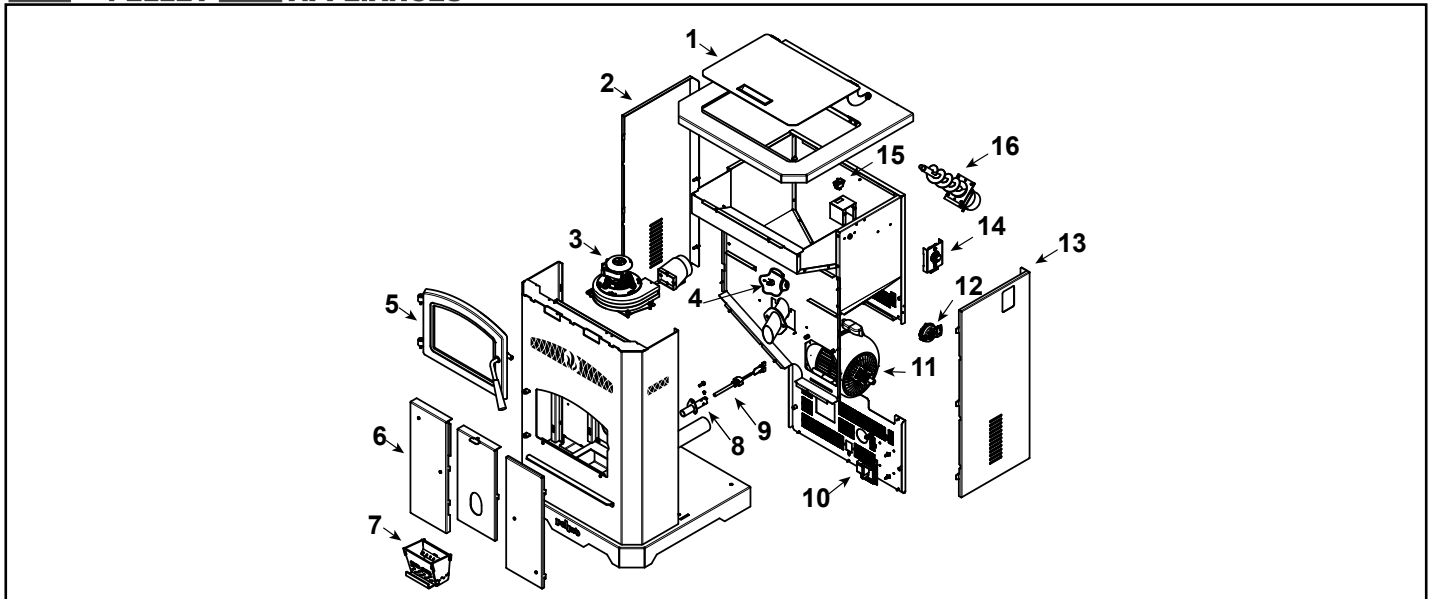
Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
5	Door Assembly		SRV7086-021	Y
5.1	Glass Assembly		SRV7081-173	
5.2	Rope, Door, 3/4" x 84"		832-1680	
5.3	Hinge Pins	Pkg of 2	433-1590/2	
5.4	Threaded Handle Assembly Kit		SRV7093-024	Y
5.5	Handle Black Phenolic Kit		KS-5140-1442	Y

#16 Feed Assembly Kit



16	Feed Assembly Kit		SRV7077-014	Y
16.1	Feed Motor		SRV7000-670	Y
16.2	Feed Shaft Bushing	Pkg of 2	7000-600/2	Y
	Power Cord		812-1180	Y
	Ambient Probe		SRV7000-668	Y
	Exhaust Probe		SRV7000-669	Y
	Wire Harness		SRV7093-184	Y
	Wire Clip	Pkg of 10	7000-400/10	Y



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual must be ordered from a dealer.



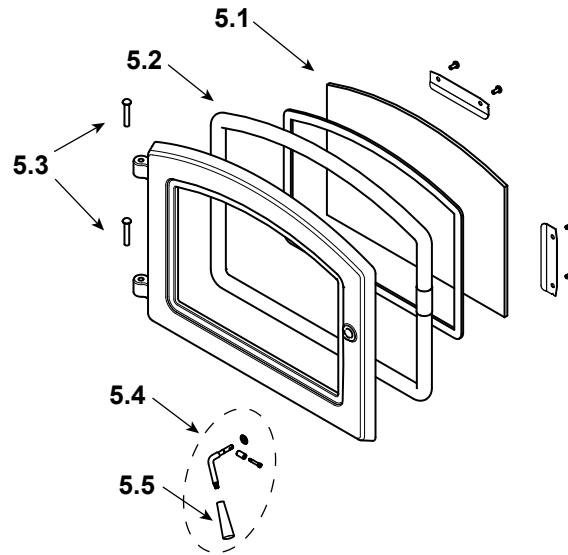
**Stocked at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Hopper Lid Assembly		SRV7086-019	
	Hopper Extension		PPHE200	
	Handle, Hopper Lid		SRV200-0110	
2	Side Curtain, Left Hand		SRV7086-154	
3	Exhaust Combustion Blower		812-4400	Y
	Gasket, Between Blower Housing and Stove		SRV240-0812	Y
	Gasket, Between Blower Housing and Motor		812-4710	Y
4	Snap disc, Manual Reset		SRV230-0080	Y
5	Door Assembly		SRV7086-021	Y
6	Baffle Kit		SRV7077-006	
7	Firepot		SRV7077-003	Y
8	Igniter Chamber Kit		SRV7077-110	
9	Igniter Kit		SRV7000-660	Y
10	Control Board		SRV7104-050	Y
11	Convection Blower		KS-5020-1052	Y
	Convection Blower Gasket		SRV7081-195	
	Convection Blower Bracket		SRV7081-210	
12	Vacuum Switch		SRV7000-531	Y
	Vacuum Hose, 5/32 ID	3 Ft	SRV240-0450	Y
	Hose, Barb Assembly		SRV229-0920	
13	Side Curtain, Right Hand		SRV7086-153	Y
14	Dial Control		SRV7083-036	Y
	Wire Harness, Dial Control		SRV7000-667	Y
15	Hopper Switch		SRV7000-612	Y

See Following page for additional service parts

6/21

#5 Door Assembly



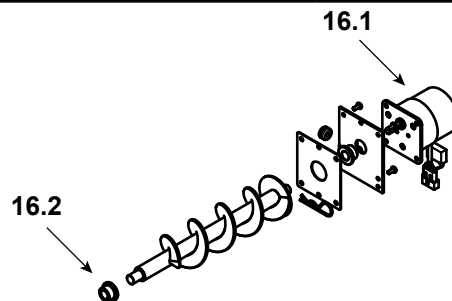
IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual must be ordered from a dealer.



Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
5	Door Assembly		SRV7086-021	Y
5.1	Glass Assembly		SRV7081-173	
5.2	Rope, Door, 3/4" x 84"		832-1680	
5.3	Hinge Pins	Pkg of 2	433-1590/2	
5.4	Threaded Handle Assembly Kit		SRV7093-024D	Y
	Shoulder Bolt, 1/4 x 1	No longer available	SRV7000-944	
5.5	Handle Black Phenolic Kit		KS-5140-1442	Y

#16 Feed Assembly Kit

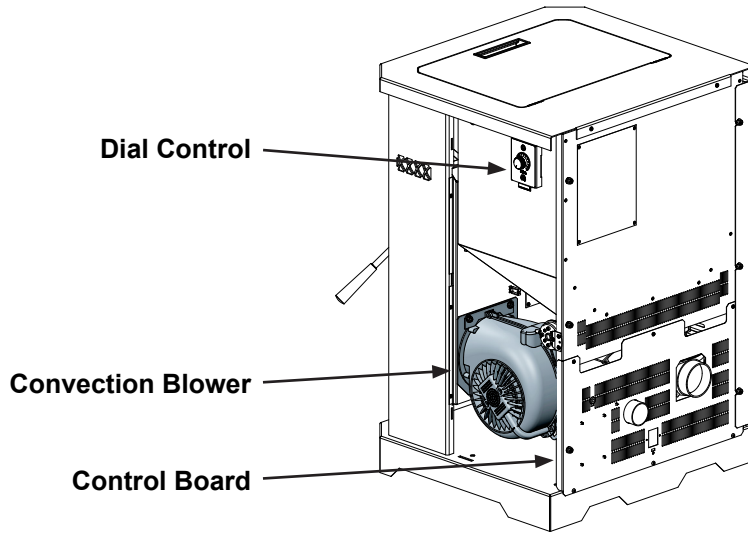


16	Feed Assembly Kit		SRV7077-014	Y
16.1	Feed Motor		SRV7000-670	Y
16.2	Feed Shaft Bushing	Pkg of 2	7000-600/2	Y
	Power Cord		812-1180	Y
	Ambient Probe		SRV7000-668	Y
	Component Pack		SRV7104-028	
	Exhaust Probe		SRV7000-669	Y
	Wire Harness		SRV7093-184	Y
	Wire Clip	Pkg of 10	7000-400/10	Y

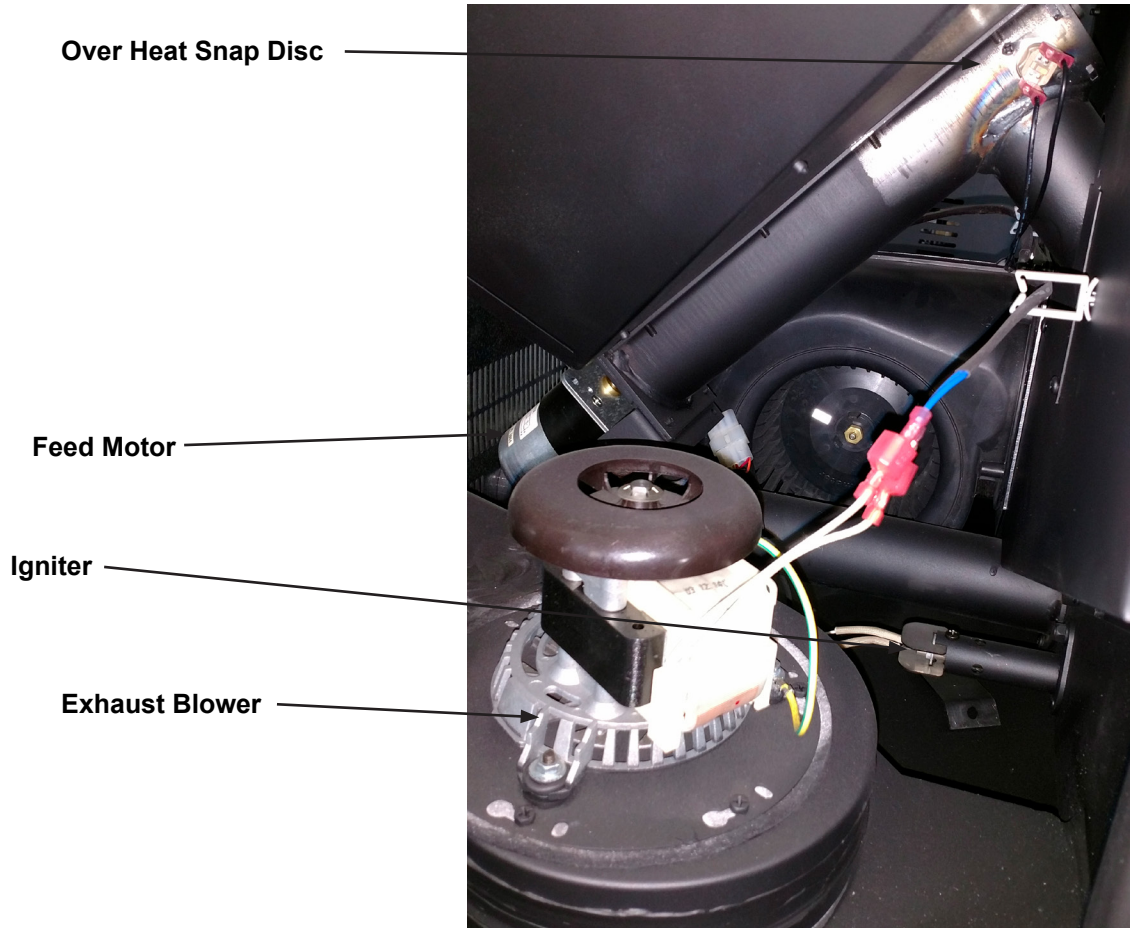
# PART LOCATIONS

**Note:** Other models are in similar location.

## Right Side



## Left Side



# Operation Flow Chart

1: Set dial control to desired temperature. (green light on dial control will change from a slow blink to rapid blink)



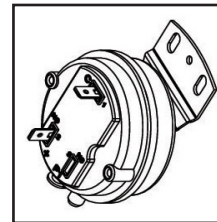
2: Exhaust blower turns on.



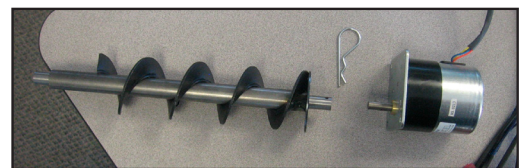
3: Igniter turns on.



4: Vacuum switch closes.



5: Feed motor will turn on after the 1 min igniter preheat sequence expires. Initial feed will be for 60 seconds and stop.



6: Pellets ignite in the firepot.



# Operation Flow Chart

7: Exhaust probe senses a 6 degree increase per minute for 2 consecutive minutes.

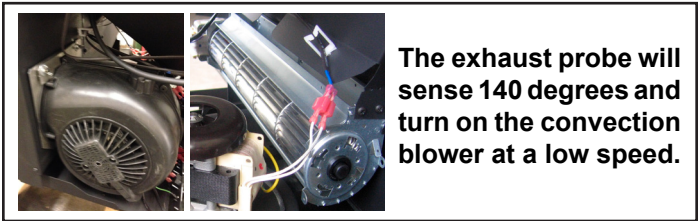


8: Igniter turns off.



9: Flame stabilization mode begins. Appliance will feed at .8 second "on time" for 3 minutes.

10: Convection blower turns on and increases speed as the appliance heats up.



11: Green blink on the dial control will change its blinks to show the current power level. Power level will vary depending on room temp vs set temp on the dial.

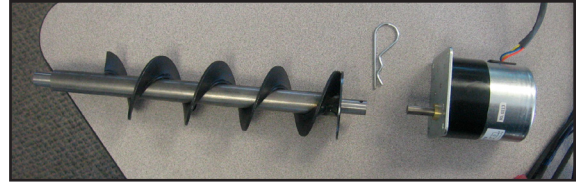
These times are at trim 0: (7 Second Cycle)				
	PP60/PP60-B	PP130	PP70	PP130-B
<b>Power Level 1:</b>	0.9 sec "on time"	0.9 sec "on time"	0.8 sec "on time"	1.0 sec "on time"
<b>Power Level 2:</b>	1.3 sec "on time"	1.5 sec "on time"	1.1 sec "on time"	1.2 sec "on time"
<b>Power Level 3:</b>	1.6 sec "on time"	2.0 sec "on time"	1.4 sec "on time"	1.6 sec "on time"
<b>Power Level 4:</b>	2.0 sec "on time"	2.5 sec "on time"	1.7 sec "on time"	2.1 sec "on time"
<b>Power Level 5:</b>	2.4 sec "on time"	3.1 sec "on time"	2.0 sec "on time"	2.6 sec "on time"

12: Set temperature is met.



# OPERATION FLOW CHART

13: Feed motor turns off.



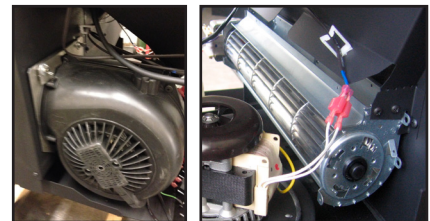
14: Exhaust blower starts the shutdown cycle. Blower will run at maximum rpm. Dial control will show a rapid yellow blink.



15: Fire goes out in the firepot. Appliance will continue to cool.



16: Exhaust probe drops below 140 degrees and shuts the convection blower off.



17: 12 minute shutdown timer expires and the exhaust blower shuts off.



18: End of the cycle. Green light on the dial control will go to the slow "ready" blink.







## ERROR CODE DEFINITIONS



Alarm code will be displayed on the dial control as a series of red blinks.



<b>1 Red Blink</b>	Empty Hopper Alarm. Most likely the appliance ran out of fuel or the flames are adjusted too low.
<b>2 Red Blinks</b>	Exhaust Probe Failure. A bad connection on the probe or a broken wire.
<b>3 Red Blinks</b>	Ambient Probe Failure. A bad connection on the probe or a broken wire.
<b>4 Red Blinks</b>	Missed ignition. Appliance failed to light the fuel or read a rise in temperature.
<b>8 Red Blinks</b>	Exhaust temperature over heat alarm. Appliance got too hot. Check the heat exchanger and exhaust system for obstructions.

# Troubleshooting

## ALARM CODE

## T/S CHART

1 Flash: Empty Hopper . . . . .	Page 23
2 Flashes: Exhaust Probe Fail . . . . .	Page 31
3 Flashes: Ambient Probe Alarm . . . . .	Page 30
4 Flashes: Missed Ignition . . . . .	Page 27
8 Flashes: Exhaust Over Temperature . . . . .	Page 20

## SYMPTOM

Not Feeding Pellets . . . . .	Page 37
Not Lighting the Fuel . . . . .	Page 34
Lazy or Sooty Flames . . . . .	Page 21
No Power . . . . .	Page 39
Convection Blower Not Coming On . . . . .	Page 17
Exhaust Blower Not Coming On . . . . .	Page 35
Appliance Is Not Sensing Temp in the Room . . . . .	Page 30
Firebox Vacuum Low or VAC Switch not Working . . . . .	Page 25
Dial Control Not Working . . . . .	Page 41



### WARNING



**ALWAYS UNPLUG THE STOVE BEFORE CLEANING, REPLACING COMPONENTS, RESETTING SNAP DISCS AND CHECKING WIRE CONNECTIONS.**

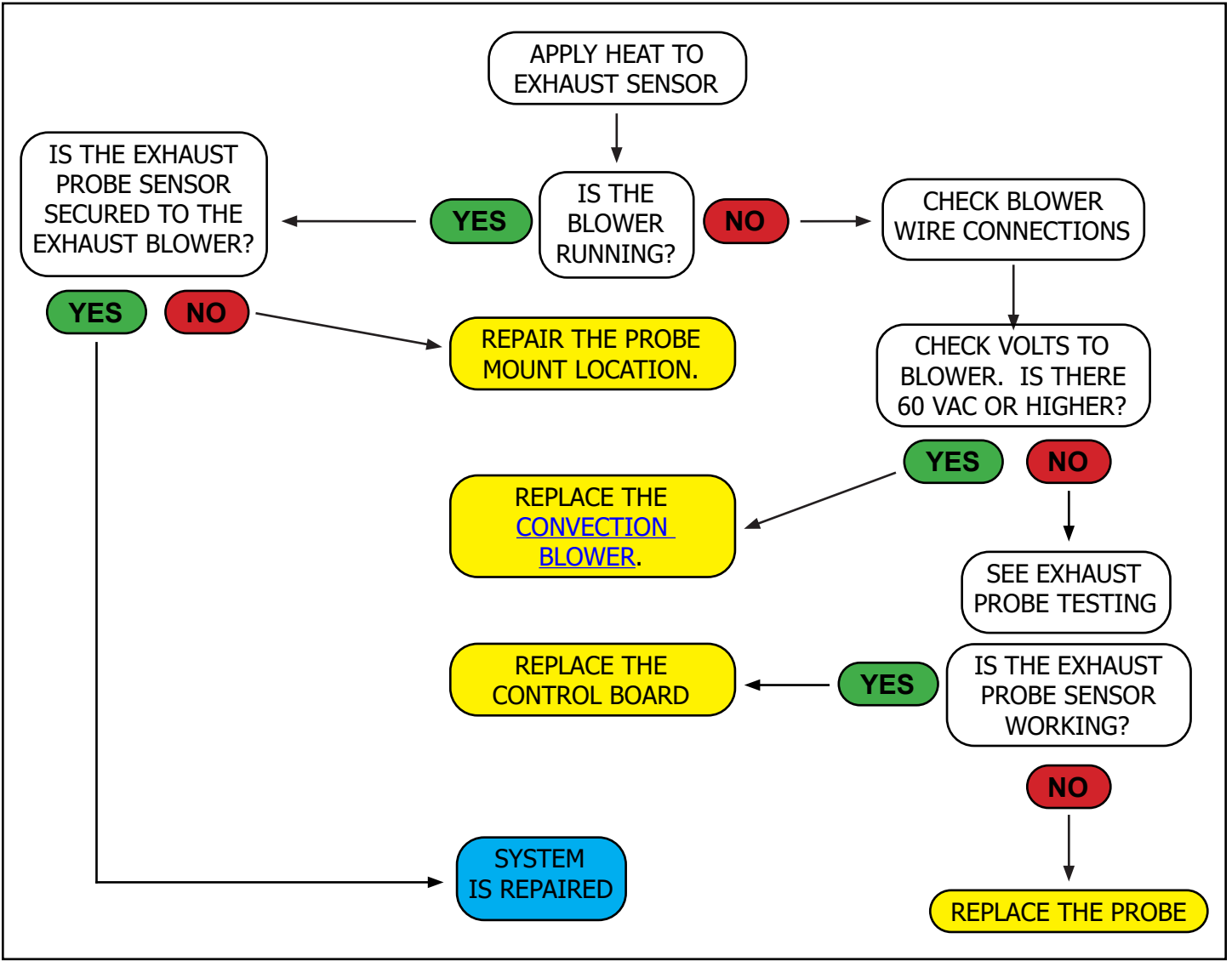
**REFER TO THE OWNERS MANUAL FOR INFORMATION ON MAKING ADJUSTMENTS TO THE Appliance OR FOR THE PROCEDURES FOR REPLACING PARTS.**

**PP70 & PP130-B APPLIANCES**  
**CONVECTION BLOWER TROUBLESHOOTING**  
*CONVECTION BLOWER NOT COMING ON*

**⚠ WARNING**

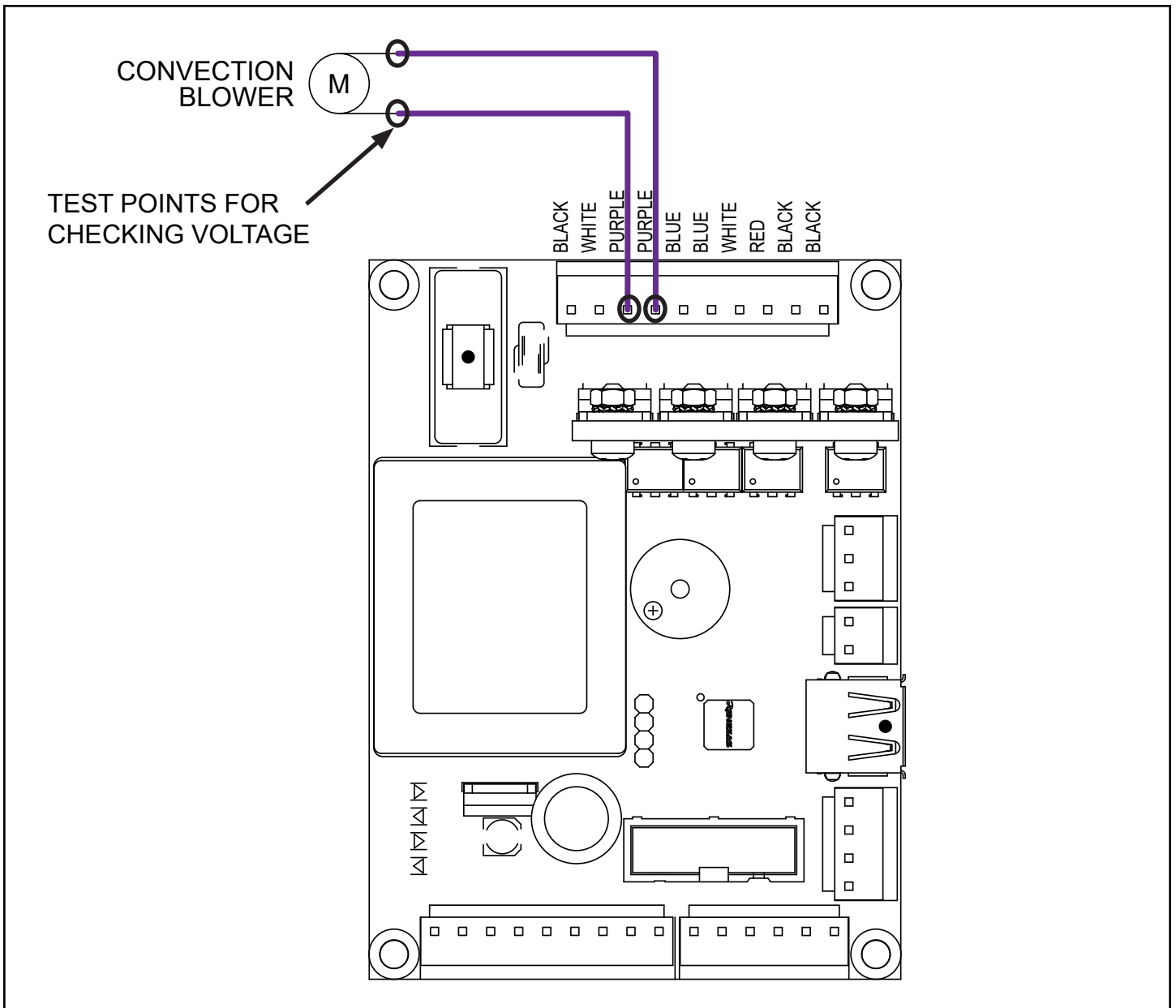


**Exposed Skin, Electric Shock Hazard**  
 Unit must be connected to power for some troubleshooting steps. **DO NOT** allow energized connections to touch appliance body.



Testing Locations & Readings on next page.

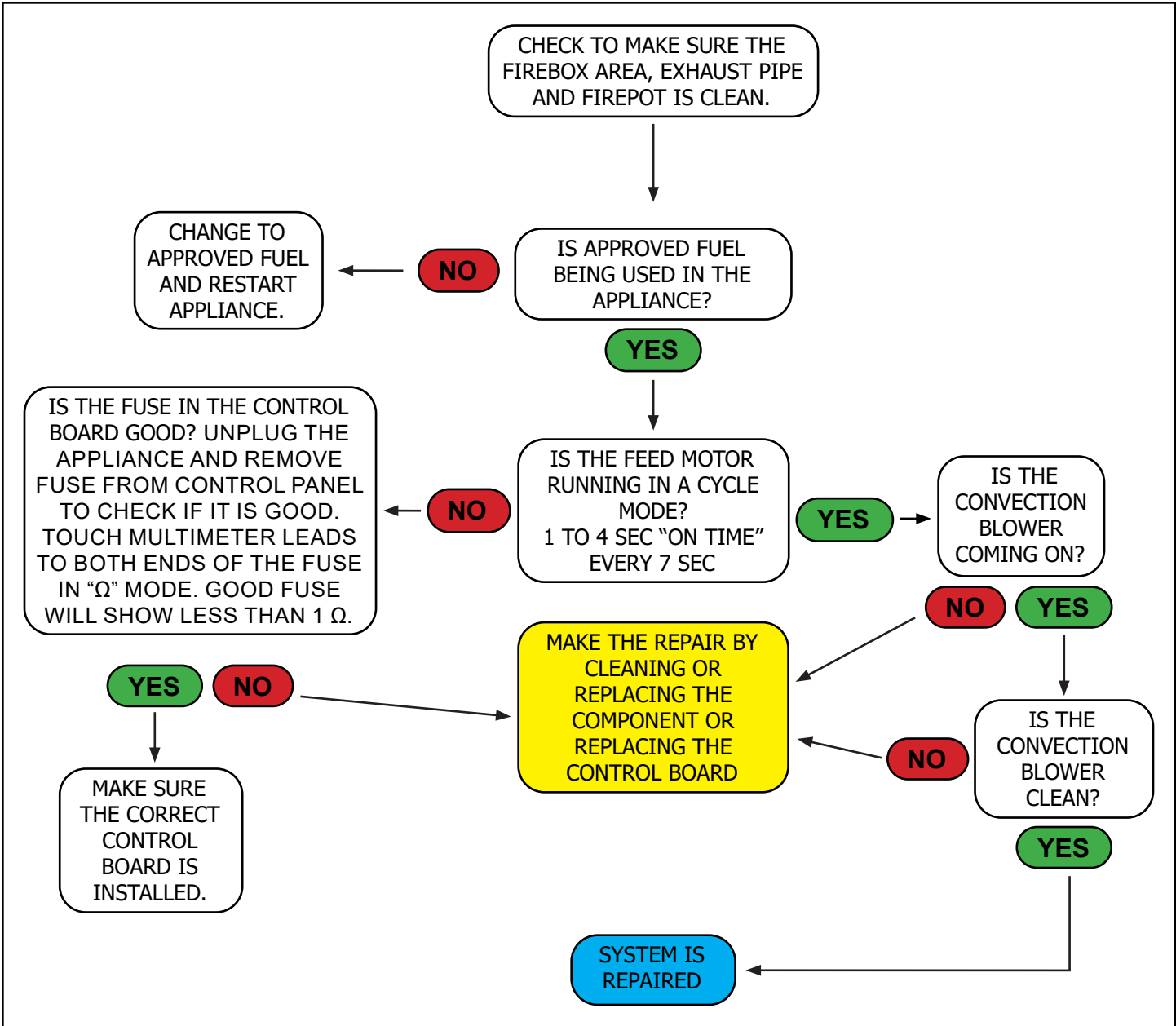
## CONVECTION BLOWER TROUBLESHOOTING



**CONVECTION BLOWER VOLTS RANGE: 62VAC TO 115VAC (+/- 5VAC)**

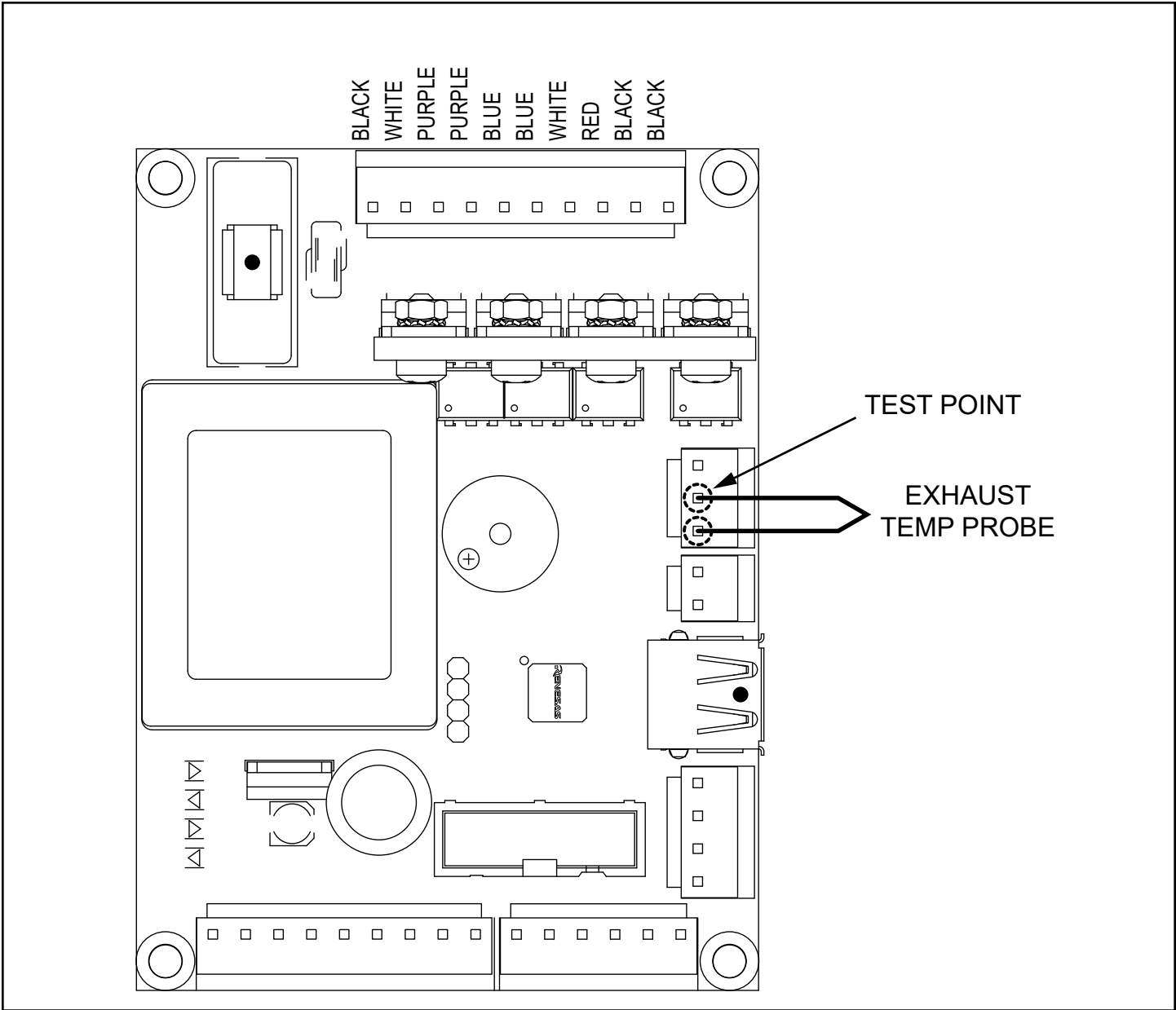
**Convection blower range changes depending on power level.**

### 8 FLASHES: EXHAUST OVER TEMPERATURE



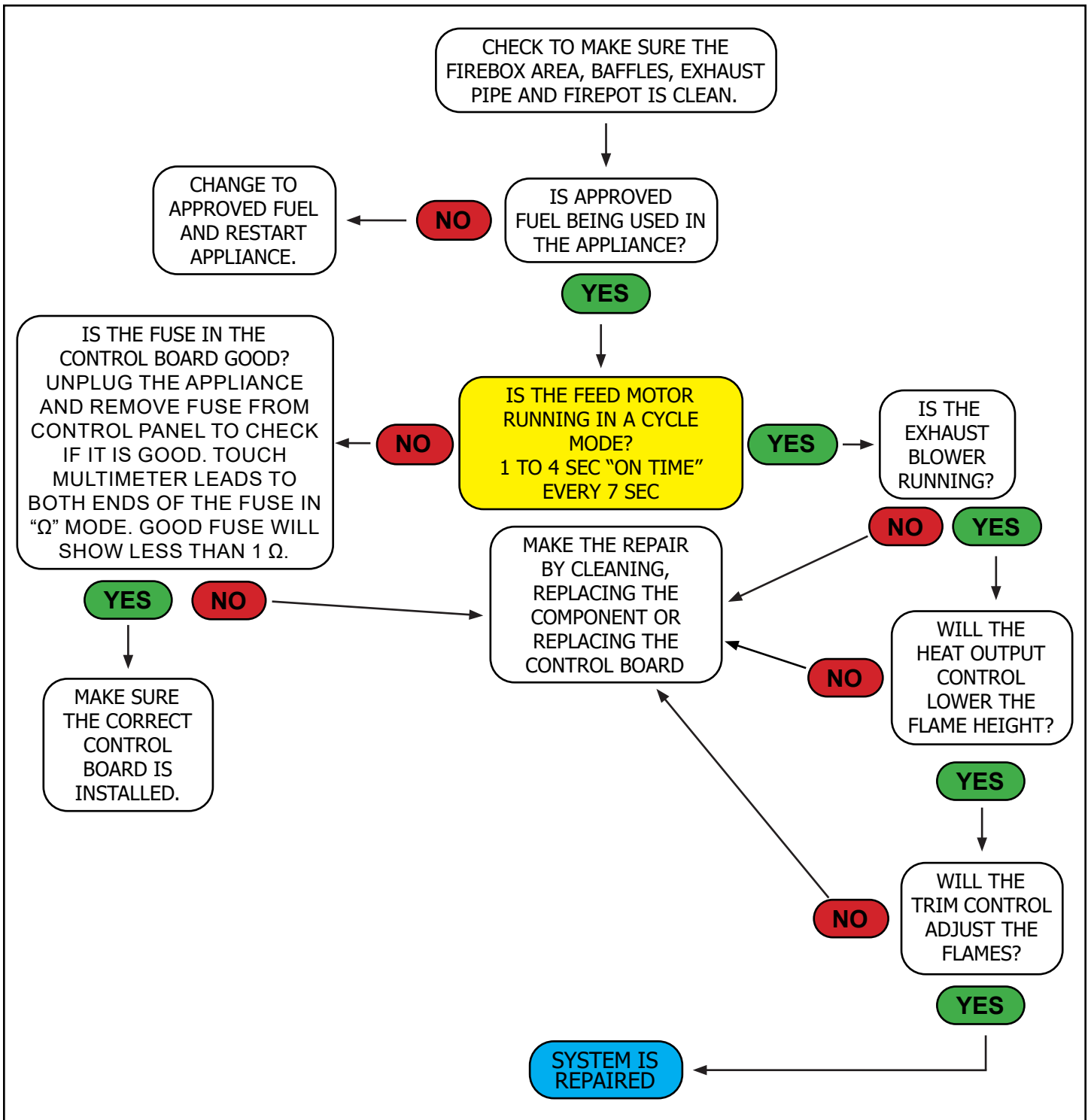
Testing Locations & Readings on next page.

**8 FLASHES: EXHAUST OVER TEMPERATURE**



AT ROOM TEMPERATURE, THE EXHAUST PROBE WILL READ AROUND 100K OHMS. AS HEAT IS APPLIED TO THE PROBE, THE OHMS READING WILL CONTINUE TO GET SMALLER.

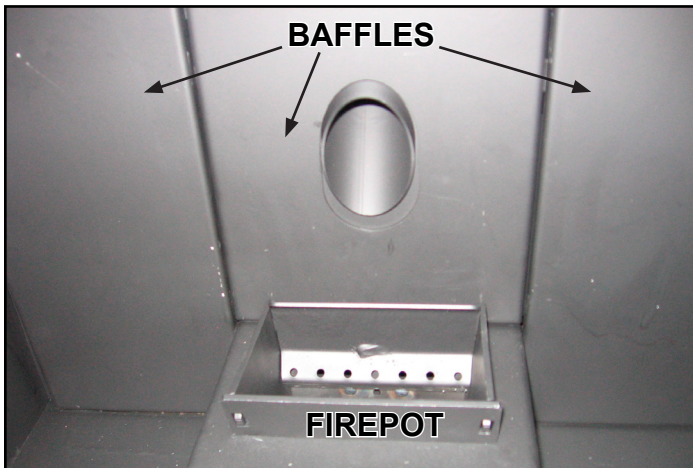
## LAZY OR SOOTY FLAMES



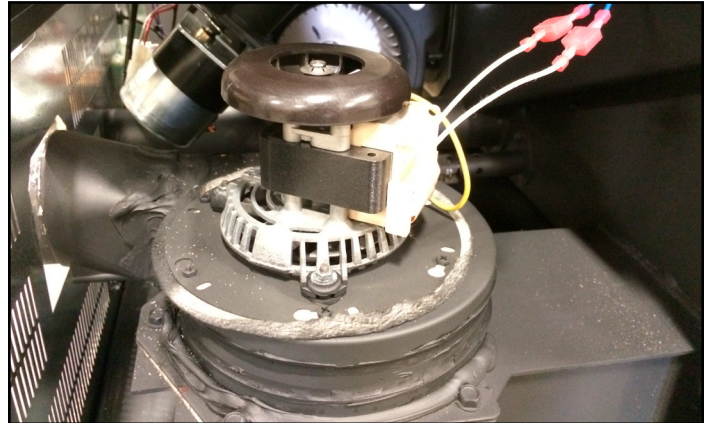
Cleaning locations on next page.

## LAZY OR SOOTY FLAMES

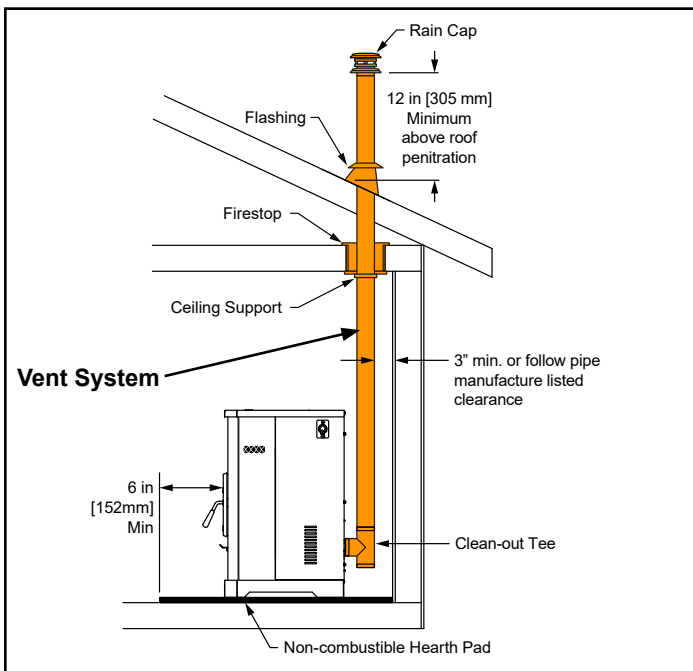
### 1. Clean Firepot and Baffles



### 3. Clean the Exhaust Blower. (Refer to Owner's manual for more instructions)

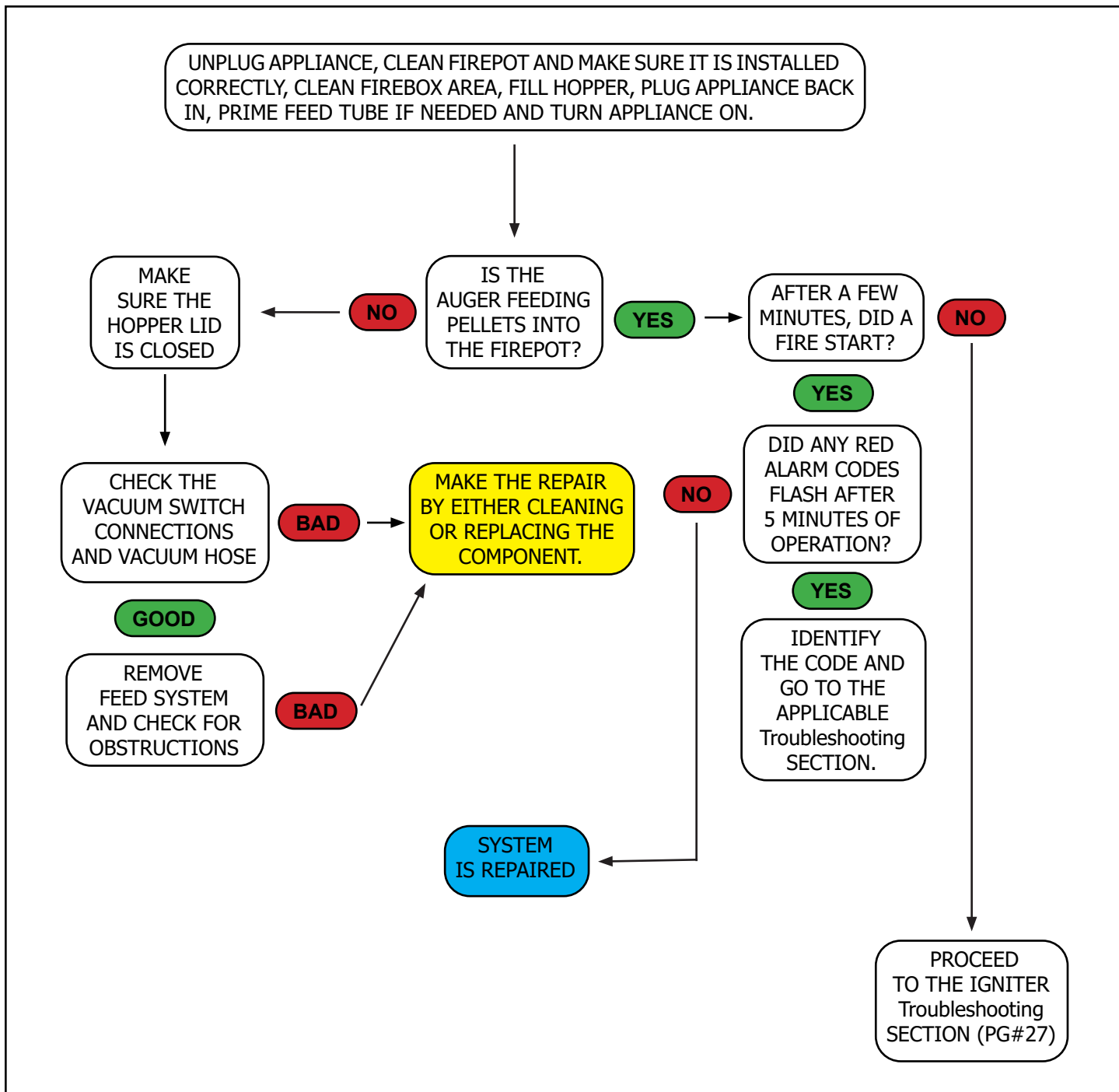


### 2. Clean the Vent System





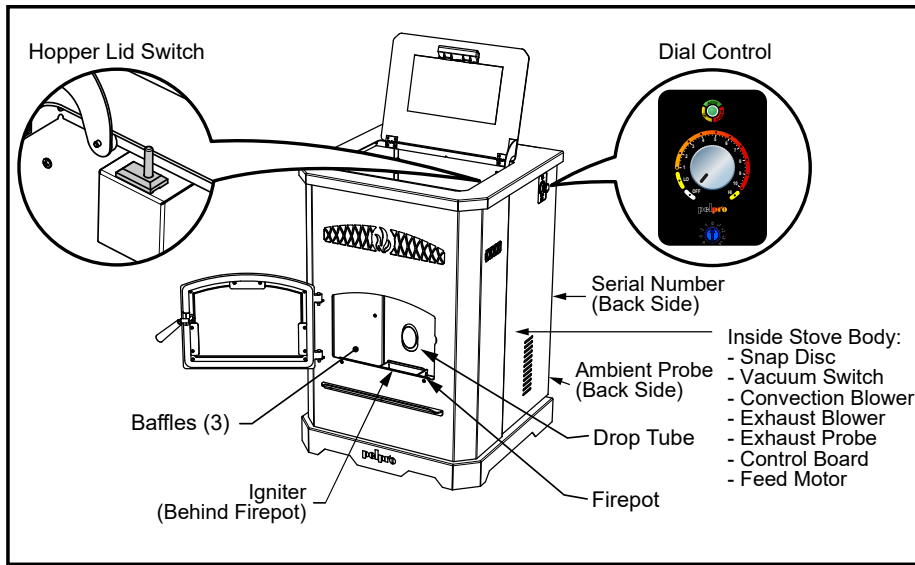
# 1 FLASH: EMPTY HOPPER



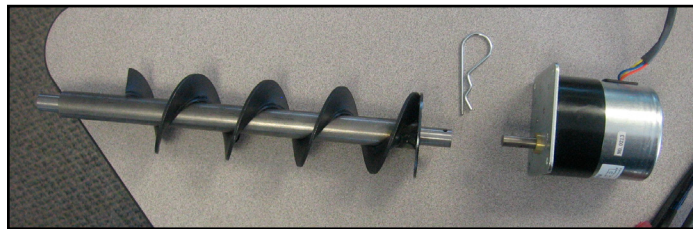
Check Locations on next page.

# 1 FLASH: EMPTY HOPPER

1. Check to see if the Hopper is empty



2. Check for a Feed Motor jam



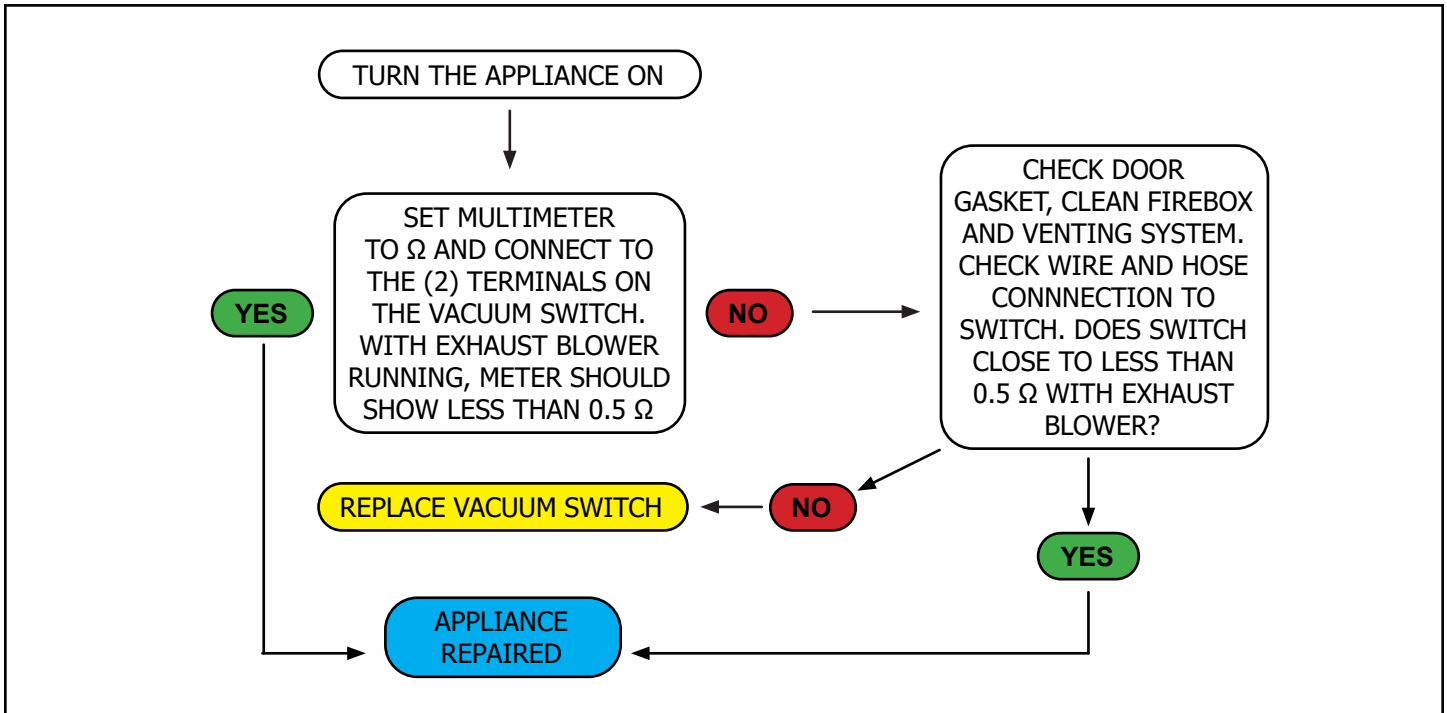
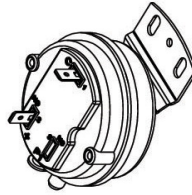
3. Check flame height adjustment.



# FIREBOX VACUUM & VACUUM SWITCH TROUBLESHOOTING

FIREBOX VACUUM LOW OR VACUUM SWITCH NOT WORKING.

VACUUM SWITCH



Test Locations and Readings on next page.

VACUUM SPECS WITH DIAL CONTROL ON "0" TRIM	
<b>COLD APPLIANCE, PELLETS IN HOPPER, BLOWER AT MAX:</b>	.19 TO .30 inches of WC
<b>POWER LEVEL 1:</b>	.11 TO .26 inches of WC
<b>POWER LEVEL 2:</b>	.11 TO .25 inches of WC
<b>POWER LEVEL 3:</b>	.12 TO .25 inches of WC
<b>POWER LEVEL 4:</b>	.13 TO .23 inches of WC
<b>POWER LEVEL 5:</b>	.15 TO .22 inches of WC
<b>SHUTDOWN:</b>	.17 TO .25 inches of WC

## FIREBOX VACUUM & VACUUM SWITCH TROUBLESHOOTING

1. Install a vacuum "TEE" between the vacuum switch and drop tube.
2. Install the vacuum gauge to the "TEE".
3. Turn thermostat on or dial control. \*\*\***NOTE:** make sure fuel is in the hopper as this can effect the vacuum reading. It takes a minimum of .04 inches of water column to close the vacuum switch.\*\*\*\*
4. Your vacuum gauge should be reading between .19 to .30 inches of water column while the exhaust blower is running on HIGH. (on a cold appliance & NO Fire).

ALL VACUUM READINGS ARE MEASURED IN INCHES OF WATER COLUMN. LONG VERTICAL VENT RUNS WILL PRODUCE **GREATER VACUUM** COMPARED TO HORIZONTAL RUNS.

### **NOTE:**

Low vacuum can be the result of a leaking door gasket, firepot not closing all of the way, dirty heat exchanger, or plugged vent system.

Always make sure the appliance is clean before making any repairs.

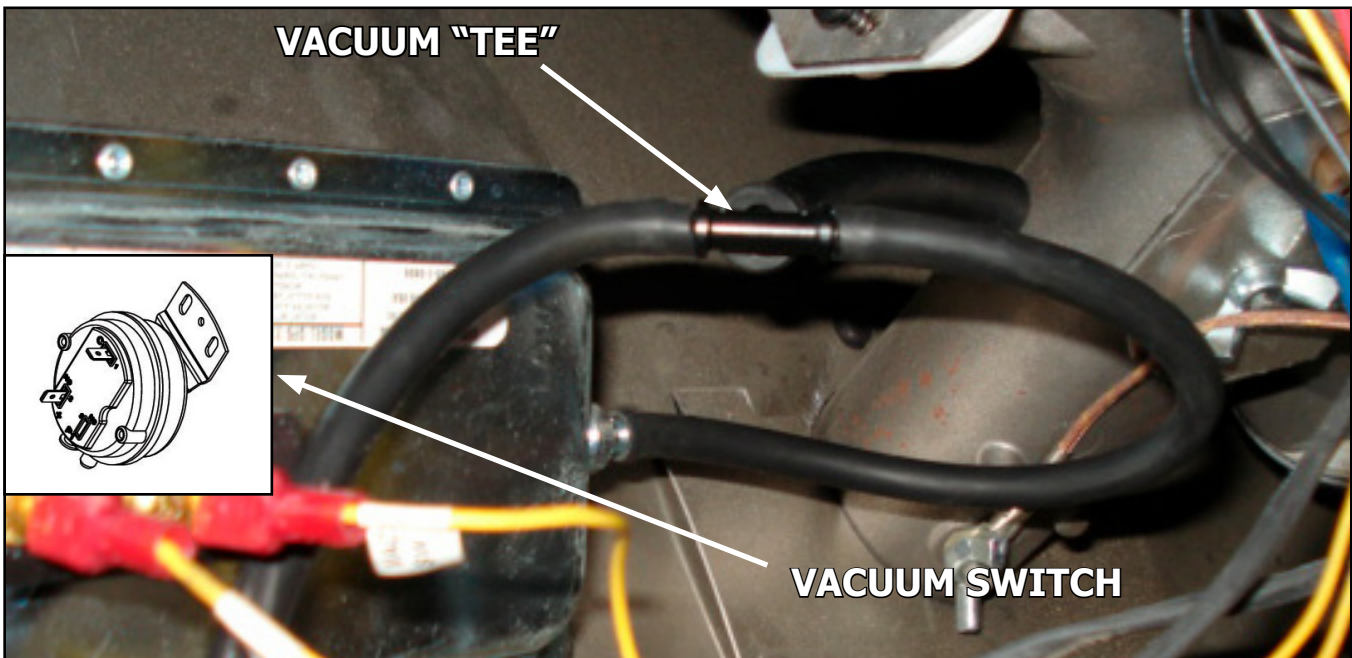


(VACUUM GAUGE)

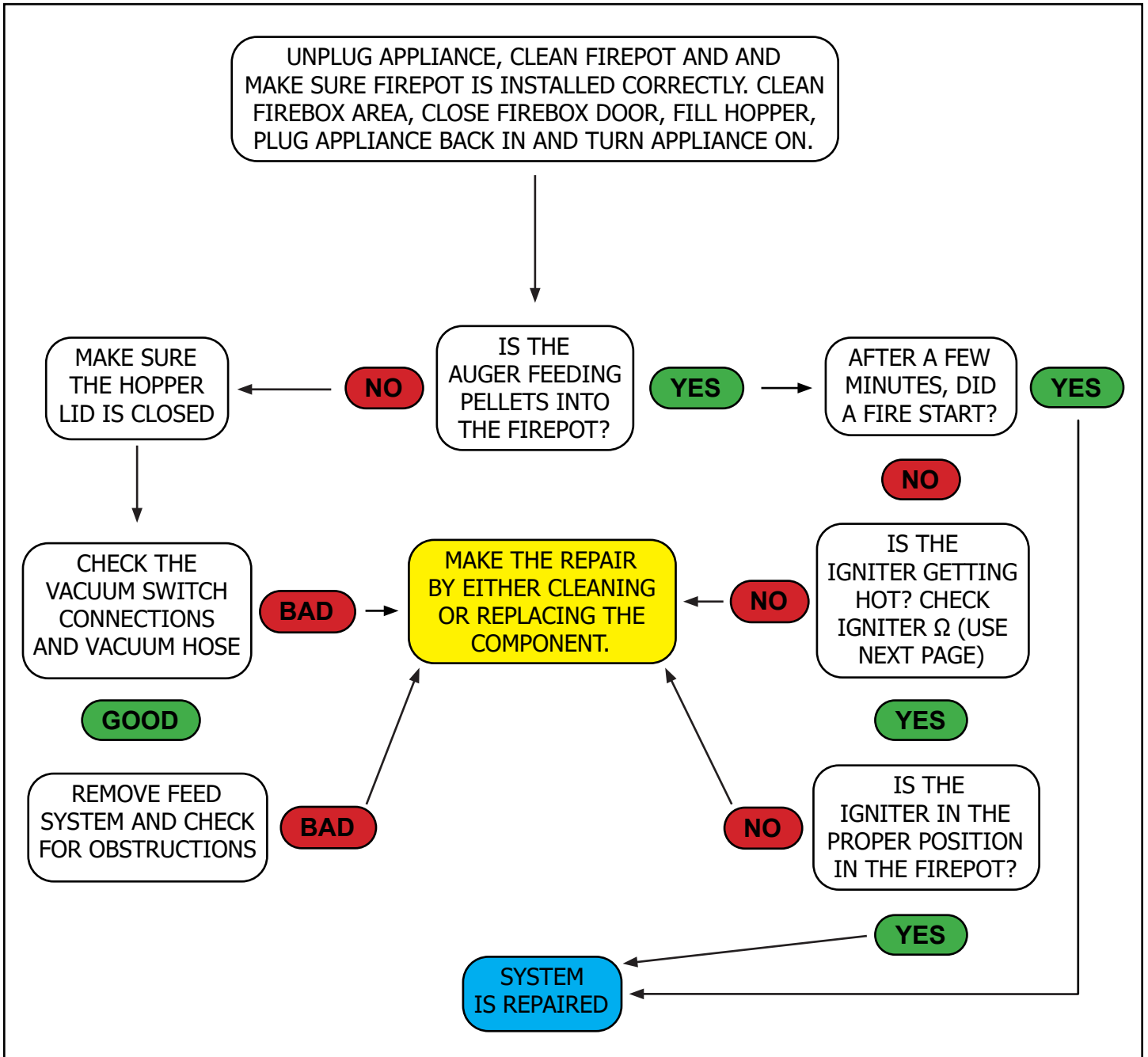
**RED** = LOW VACUUM

**GREEN** = OPERATING RANGE

**BLUE** = SHUTDOWN

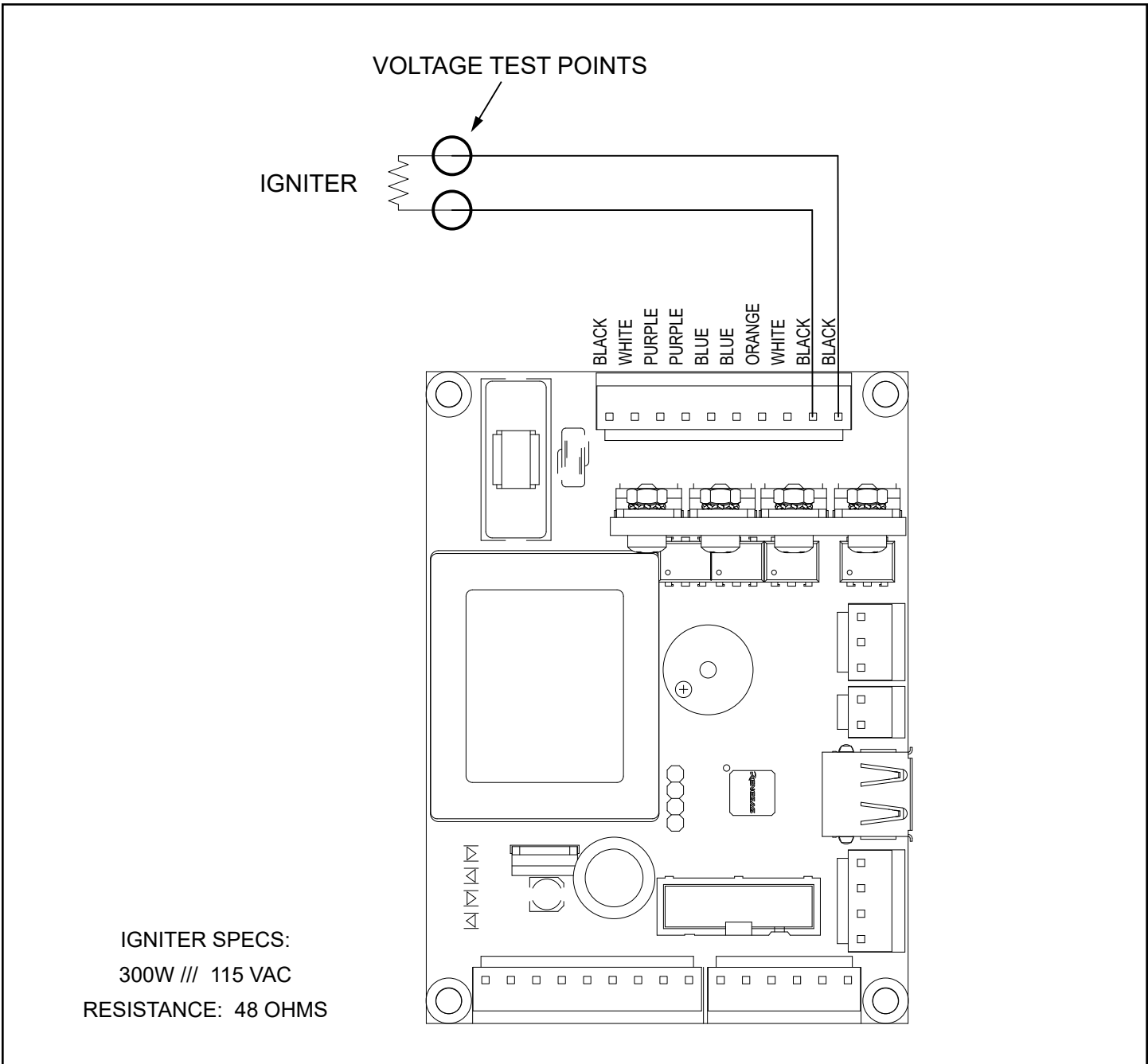


**4 FLASHES: MISSED IGNITION**  
**IGNITER TROUBLESHOOTING**

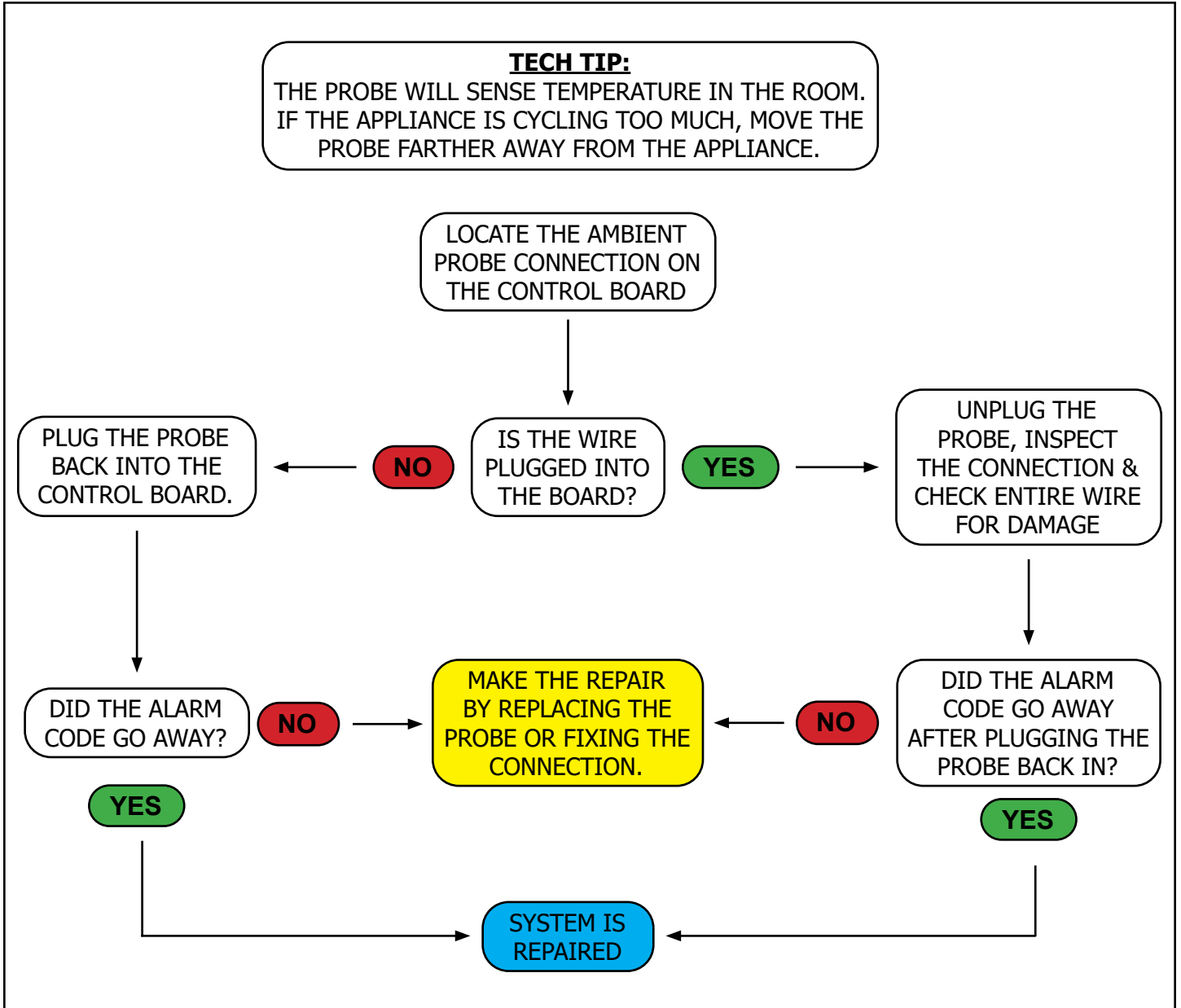


Testing Locations & Readings on next page.

# 4 FLASHES: MISSED IGNITION IGNITER TROUBLESHOOTING



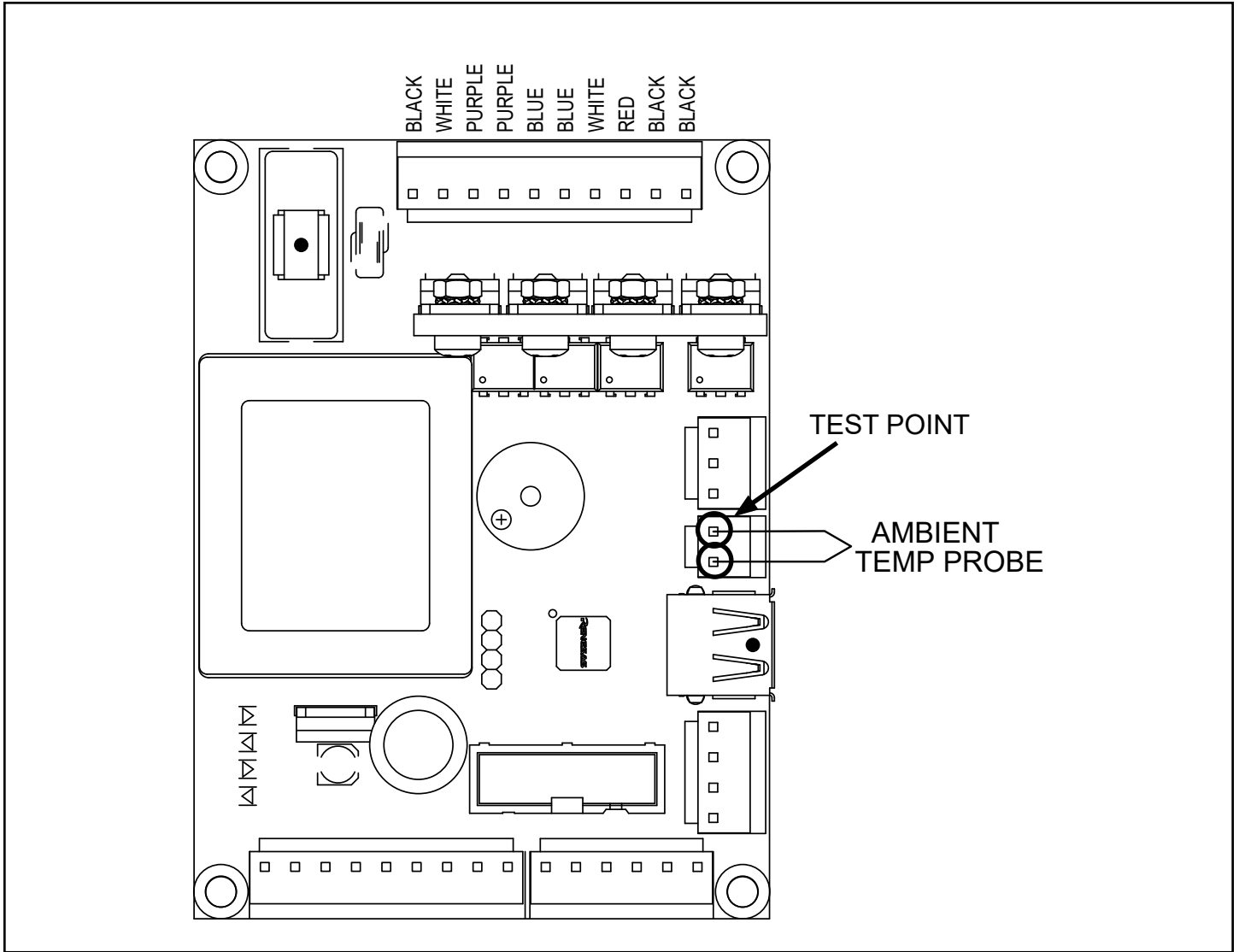
### 3 FLASHES: AMBIENT PROBE ALARM



Testing Locations and Readings on next page.

### 3 FLASHES: AMBIENT PROBE ALARM

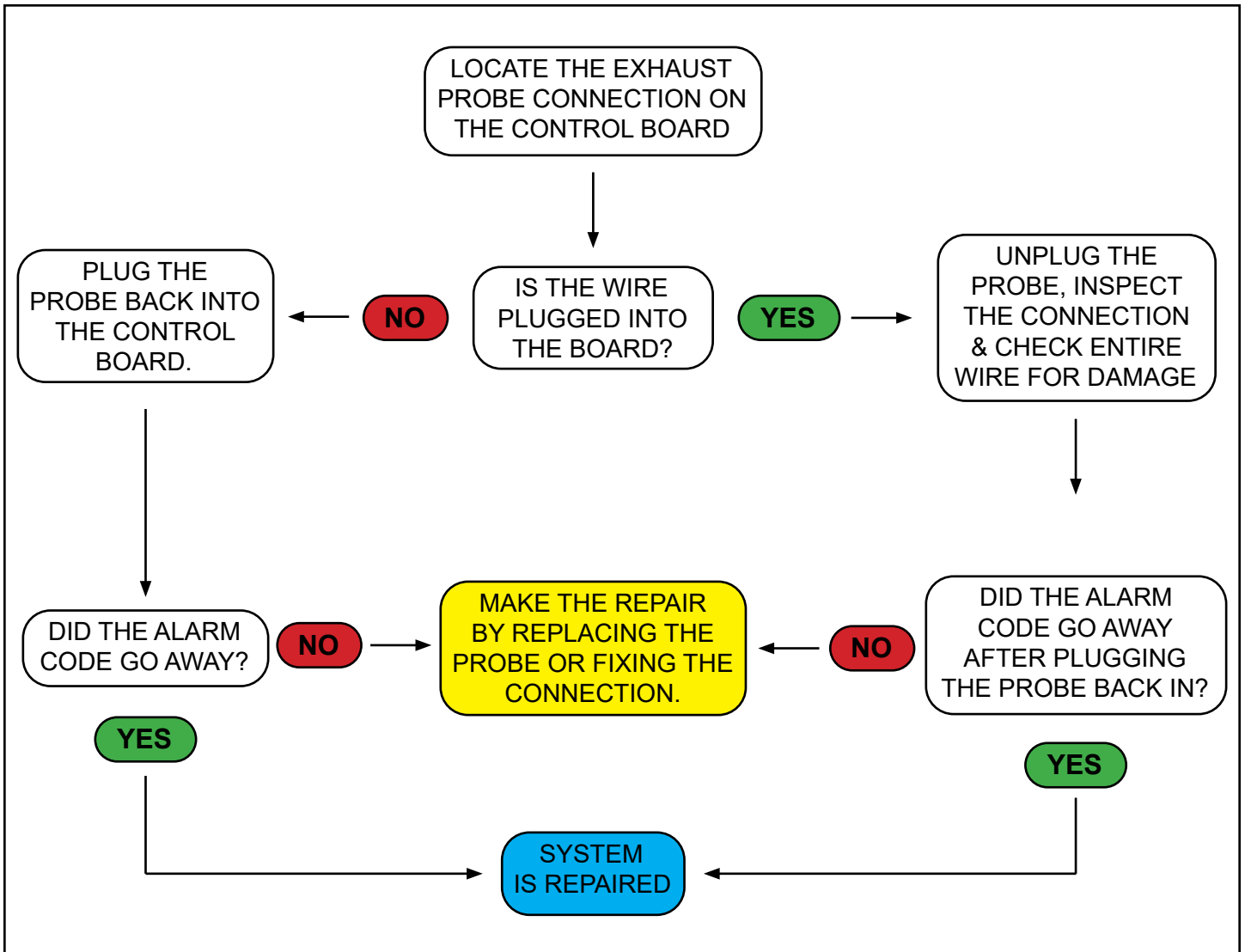
APPLIANCE IS NOT SENSING TEMP IN THE ROOM



AT ROOM TEMPERATURE, THE AMBIENT PROBE WILL READ AROUND 10.2K OHMS. AS HEAT IS APPLIED TO THE PROBE, THE OHMS READING WILL CONTINUE TO GET SMALLER.

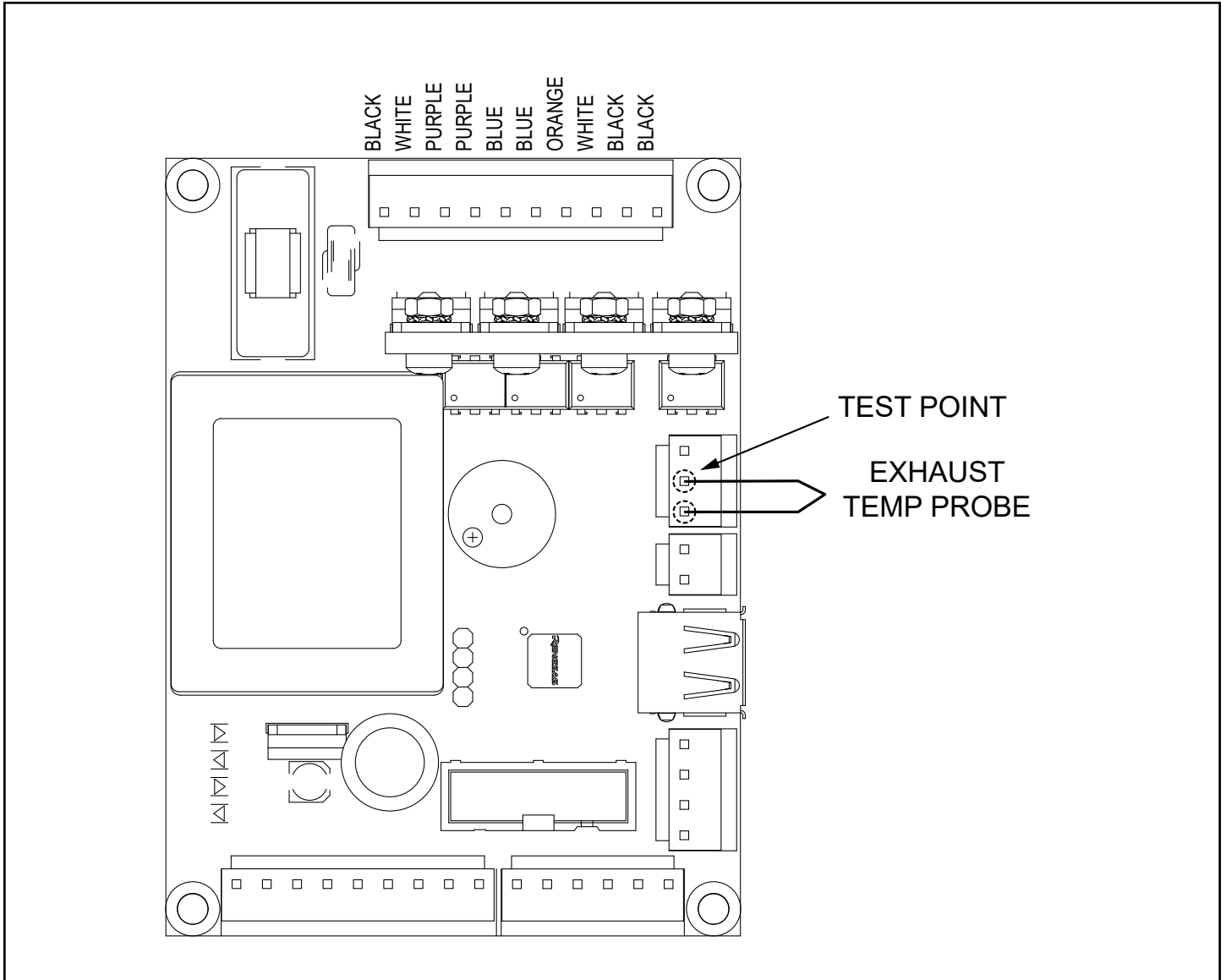


## 2 FLASHES: EXHAUST PROBE FAIL



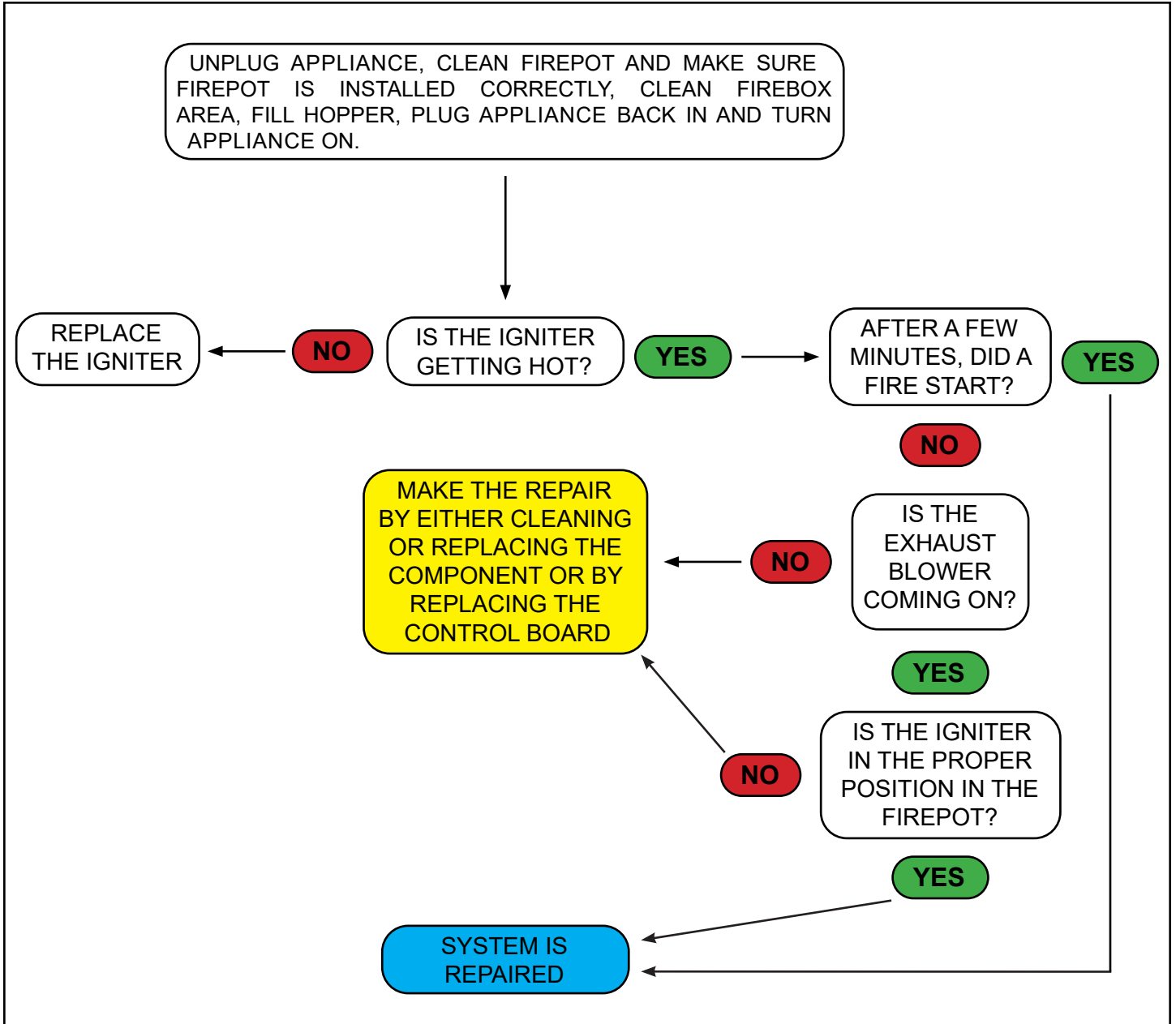
Testing Locations and Readings on next page.

## 2 FLASHES: EXHAUST PROBE FAIL



AT ROOM TEMPERATURE, THE EXHAUST PROBE WILL READ AROUND 100K OHMS. AS HEAT IS APPLIED TO THE PROBE, THE OHMS READING WILL CONTINUE TO GET SMALLER.

# NOT LIGHTING THE FUEL

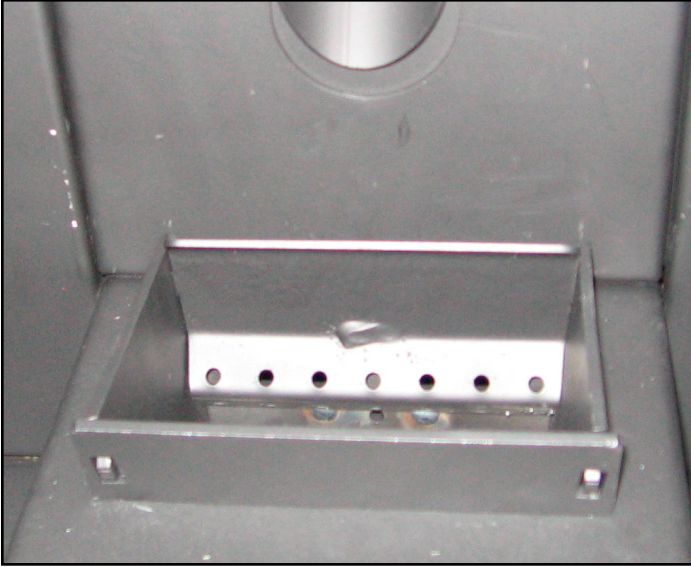


## NOT LIGHTING THE FUEL

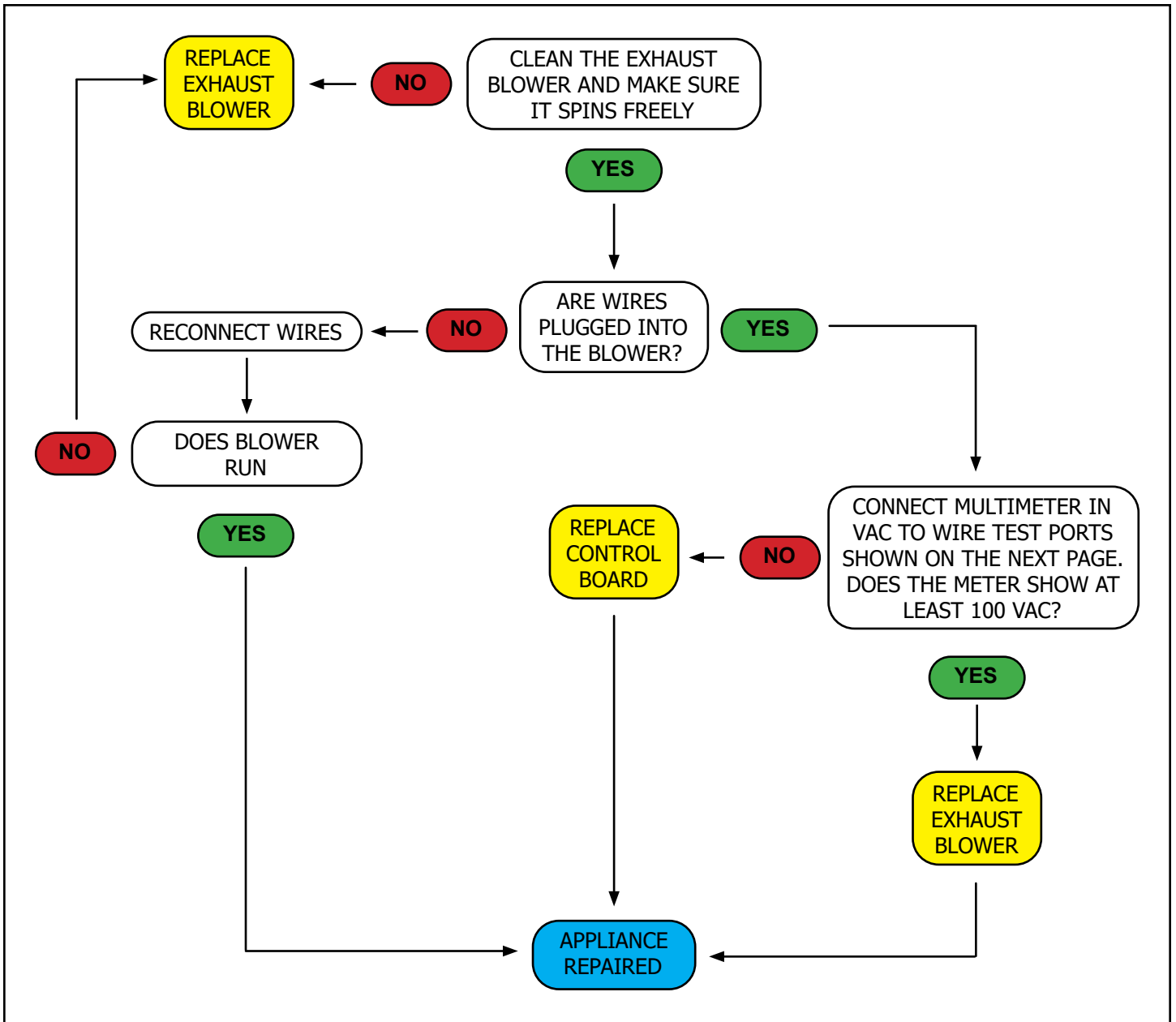
1. Check Igniter



2. Check Firepot Position

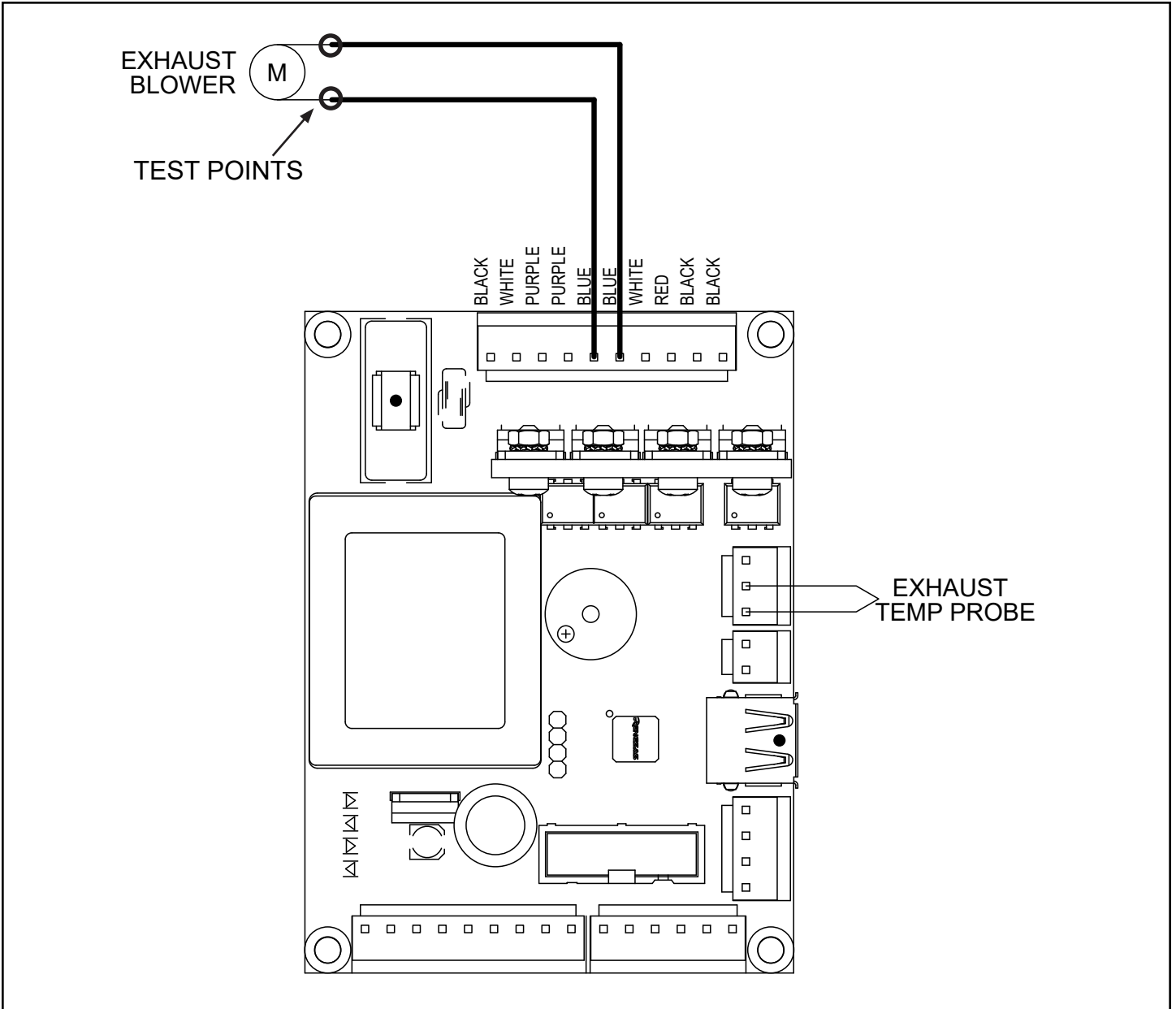


# EXHAUST BLOWER NOT COMING ON

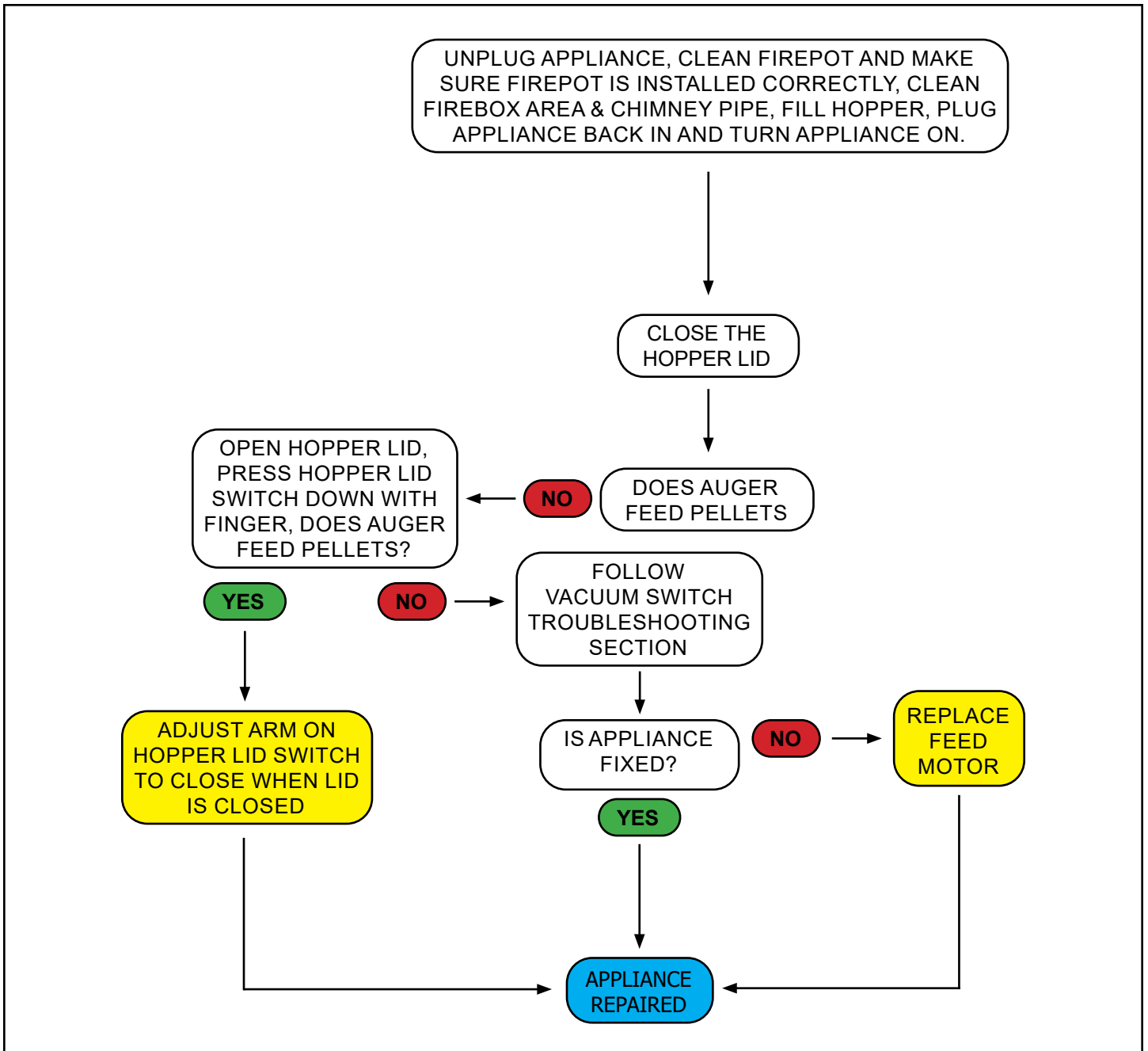


Testing locations on the next page.

# EXHAUST BLOWER NOT COMING ON

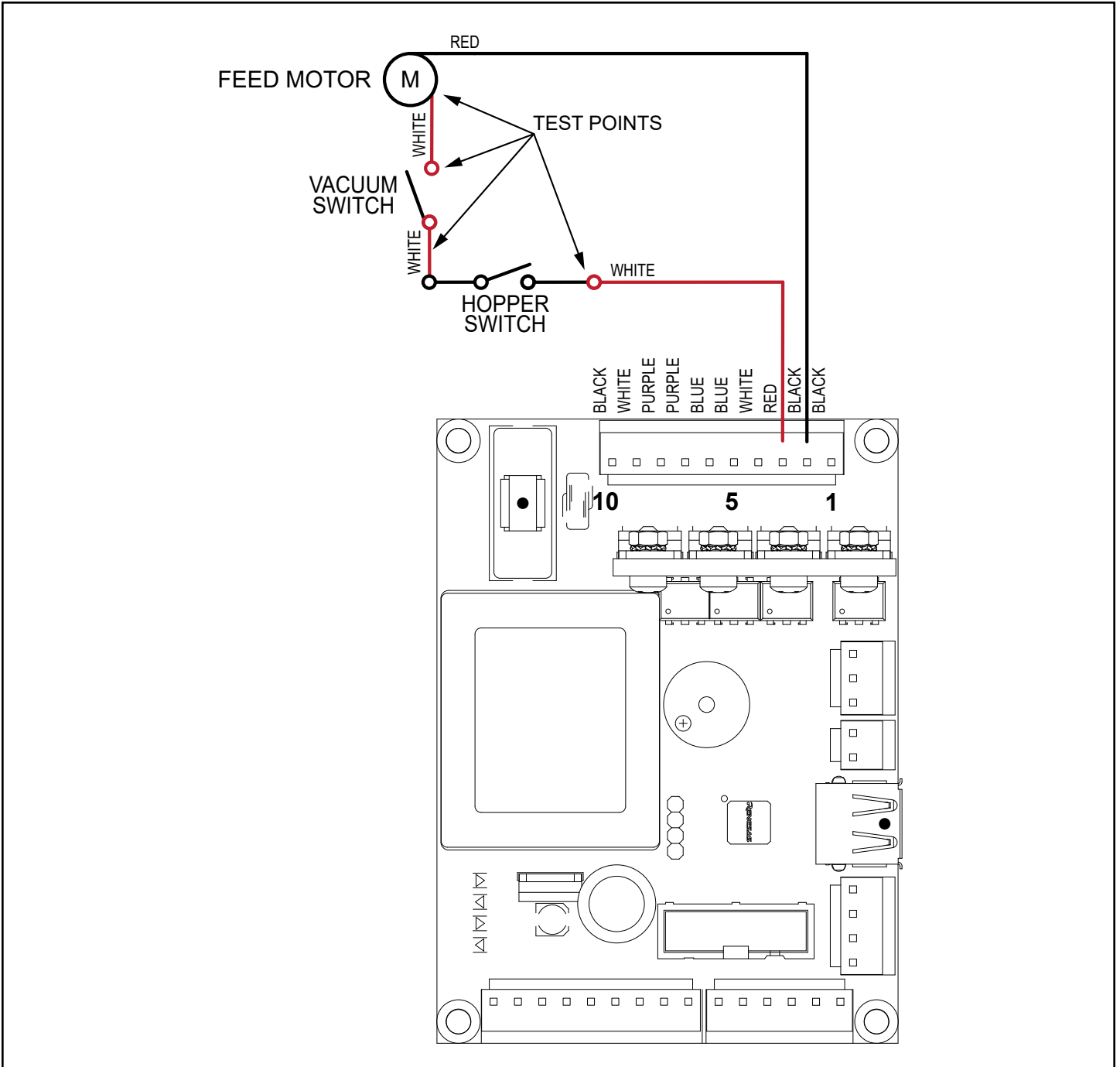


## NOT FEEDING PELLETS



Testing locations and Readings on the next page.

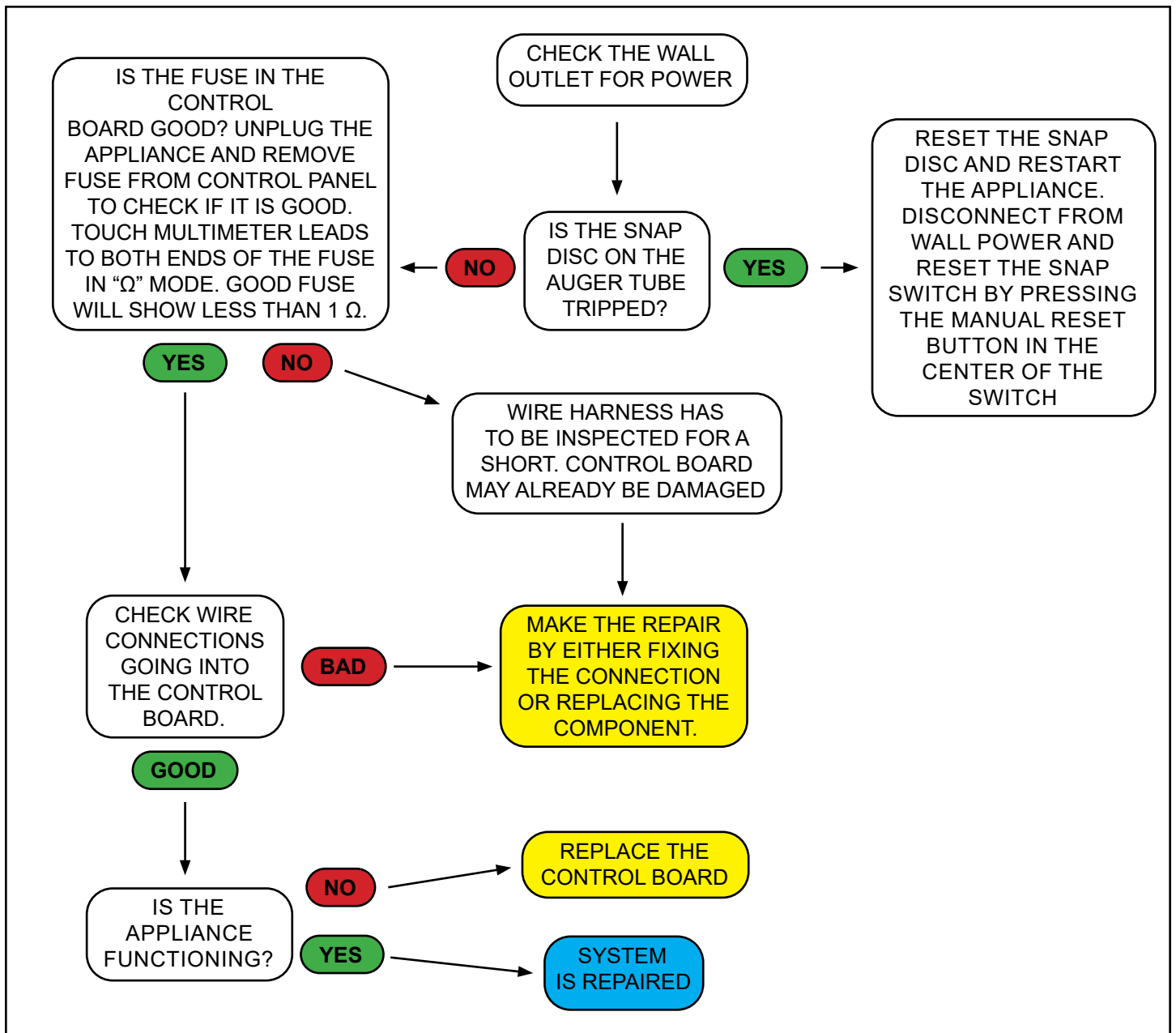
## NOT FEEDING PELLETS



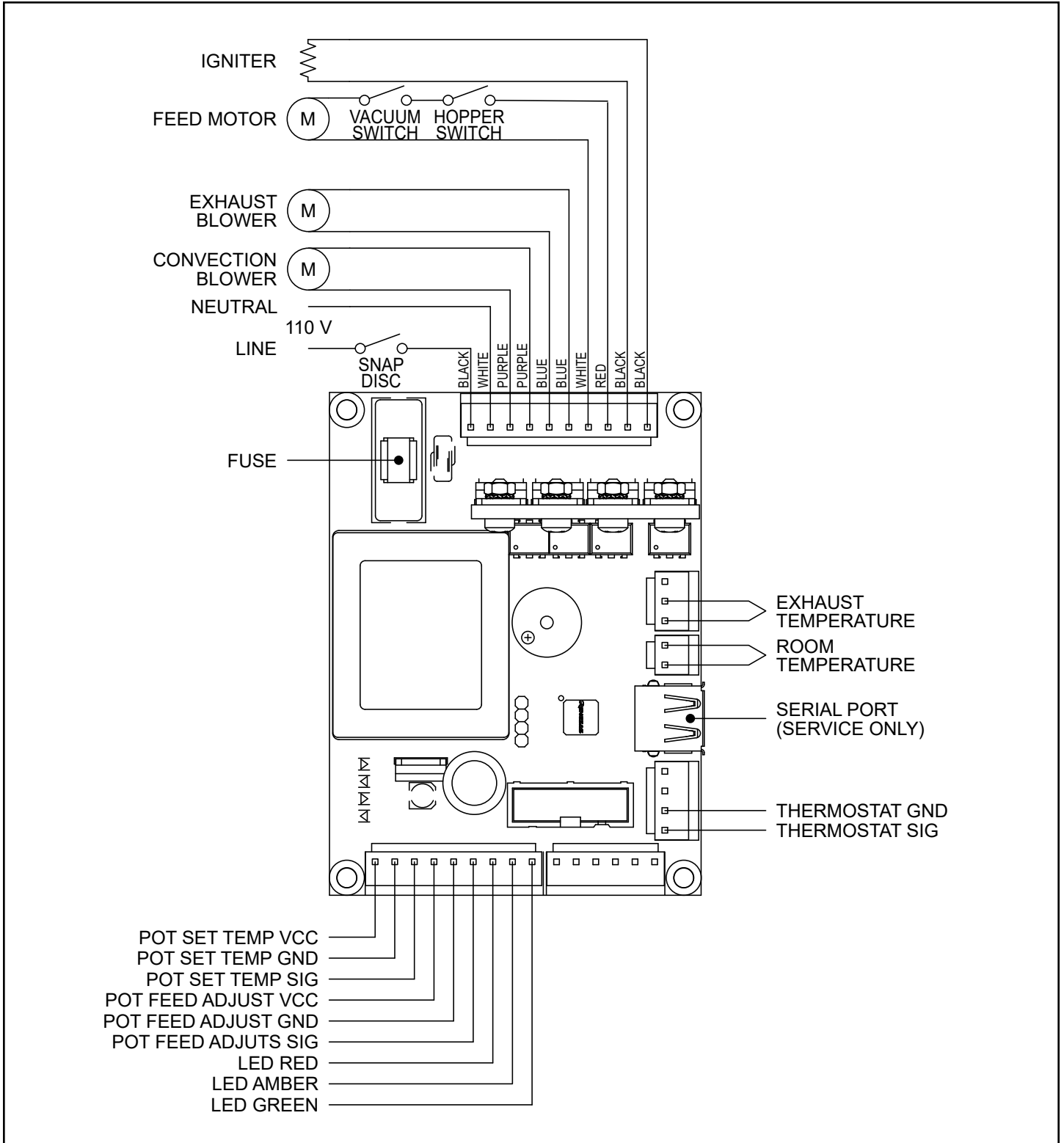
HOPPER SWITCH IS CLOSED WHEN THE HOPPER LID IS CLOSED.  
VACUUM SWITCH IS CLOSED WHEN THE EXHAUST BLOWER IS ON.  
FEED MOTOR RUNS ON 115 VAC.  
ALL CIRCUITS MUST BE CLOSED FOR THE FEED MOTOR TO WORK.



# NO POWER



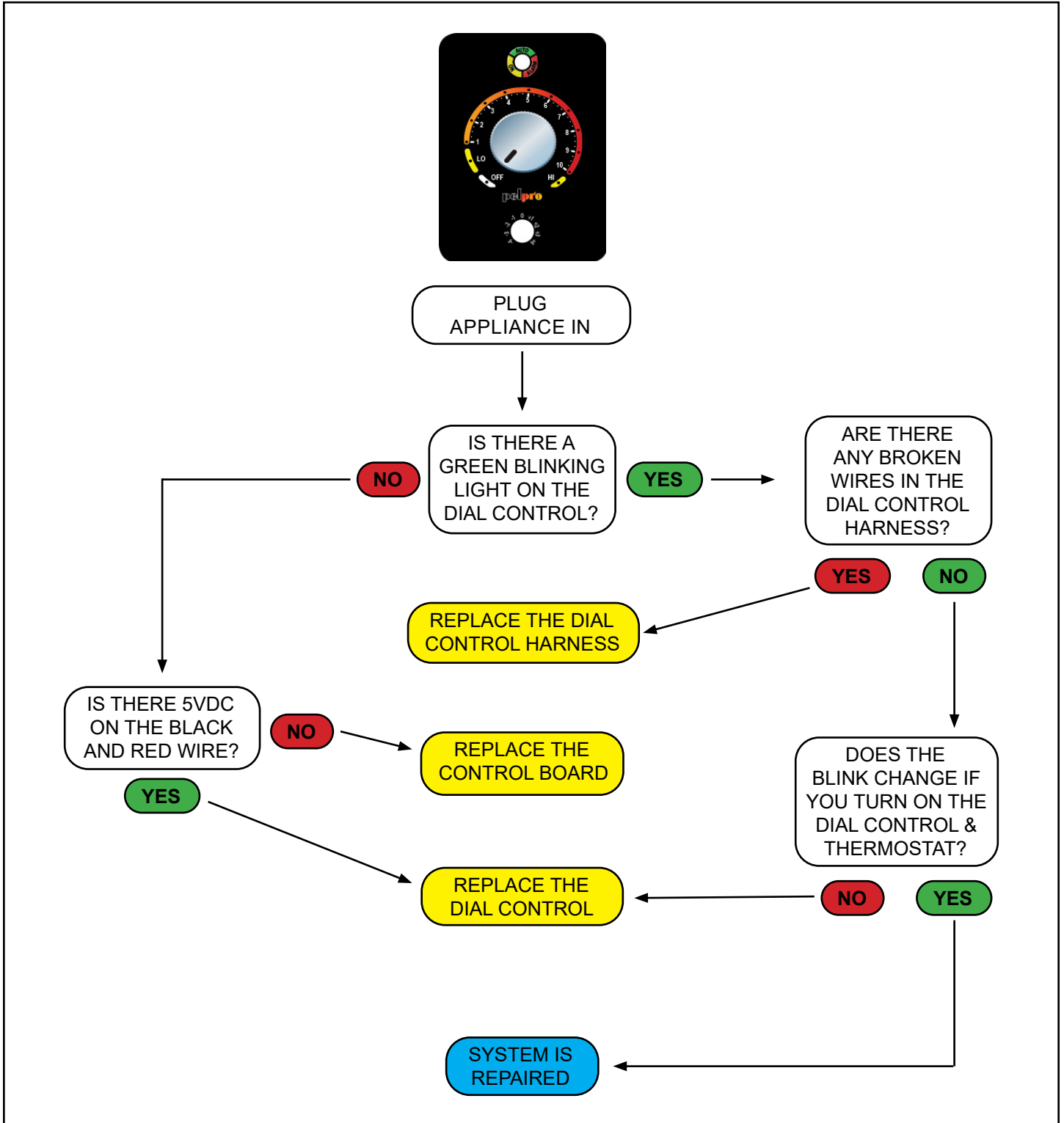
# NO POWER



**THIS IS THE MOST CURRENT WIRE DIAGRAM FOR HARNESS**

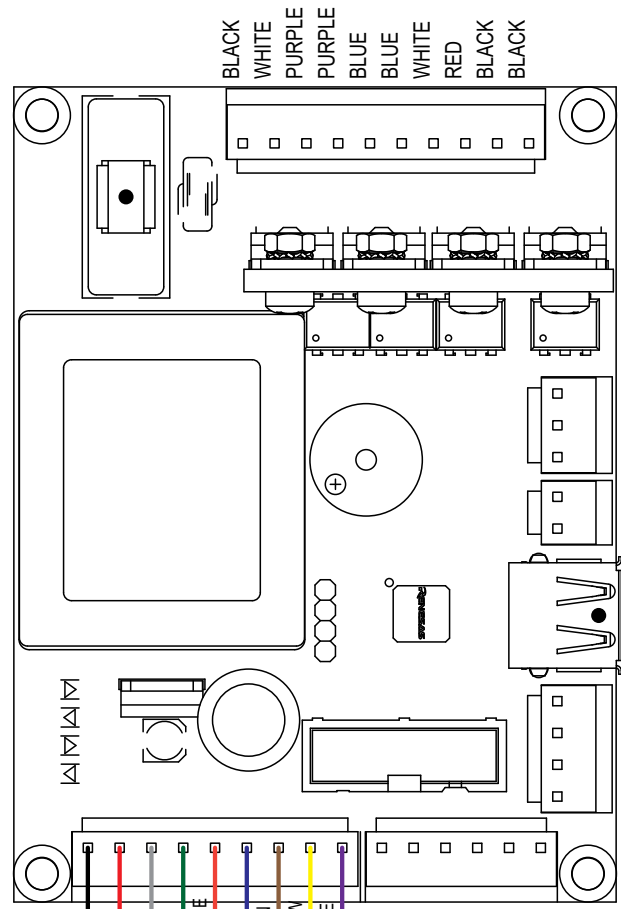
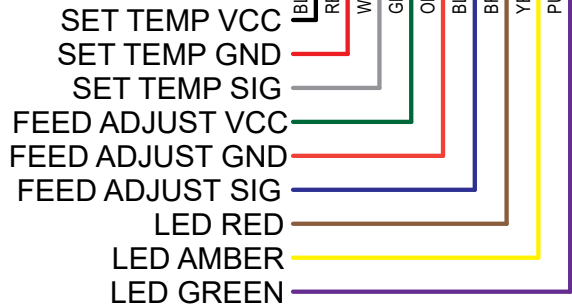
# DIAL CONTROL TROUBLESHOOTING

## DIAL CONTROL NOT WORKING



Testing locations and readings on next page.

# DIAL CONTROL TROUBLESHOOTING



## DIAL CONTROL SPECS:

5VDC POWERS THE CONTROL

RESISTANCE MEASURED ACROSS BLACK & WHITE WIRE FOR DIAL: 10K OHMS TO 0 OHMS (OFF TO HI)