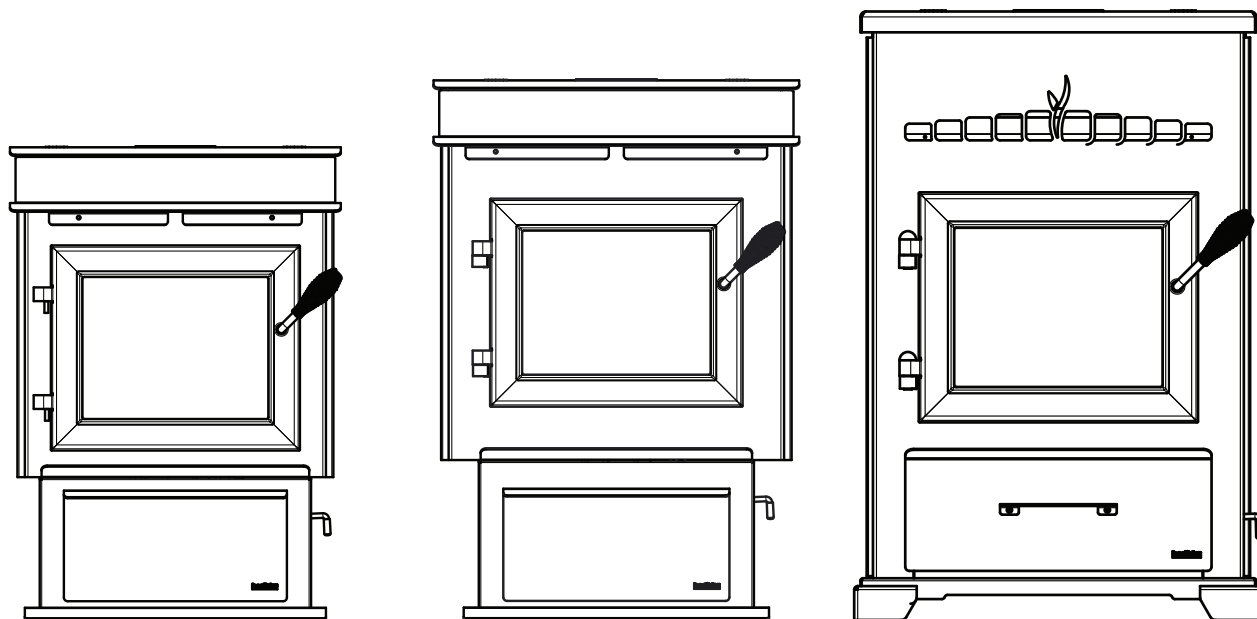


# heatilator<sup>®</sup> ECOCHOICE<sup>™</sup>

## Eco Choice Pellet Troubleshooting Manual



  
**HEARTH & HOME**  
technologies<sup>™</sup>

(THIS MANUAL IS INTENDED FOR TRAINED & QUALIFIED DEALERS &  
TECHNICIANS USE ONLY)

**Safety Alert Key:**



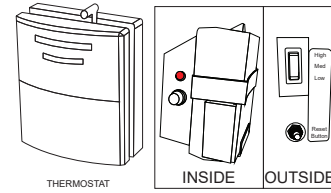
- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
  - **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
  - **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
  - **NOTICE:** Indicates practices which may cause damage to the appliance or to property.
- 

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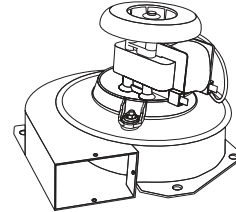
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# 1 Normal Operation Sequence

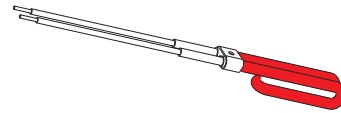
1. Thermostat turns on. Red call light illuminates on the stove.



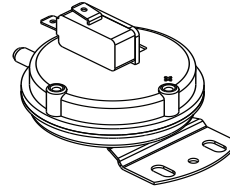
2. Exhaust blower turns on.



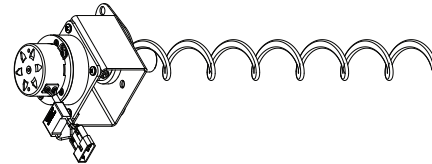
3. Igniter turns on.



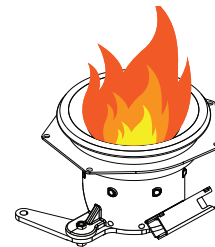
4. The vacuum switch closes.



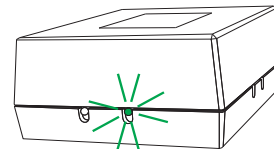
5. The feed motor turns on. The initial feed of the feed motor will last approximately 54 seconds and then stops.



6. Pellets will ignite in the fire pot.

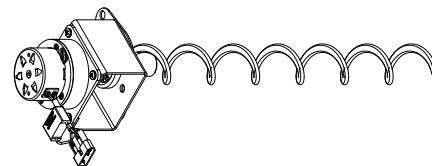


7. Heat from fire turns on the green thermocouple light in the control box (2.7mVDC).



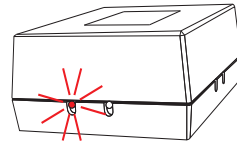
8. Feed motor starts its cycle mode (each cycle is 7 sec):

"ON" TIMES	PS35	PS50 & CAB50
SETTING	SECONDS	SECONDS
LOW	0.9	1.1
MEDIUM	1.6	1.9
HIGH	2.2	2.7

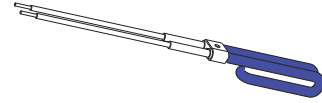


# ECO CHOICE PELLET

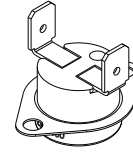
9. Heat from the fire turns on the red thermocouple light in the control box.



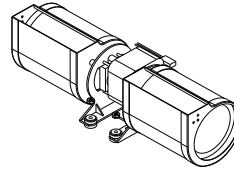
10. The igniter turns off



11. Heat from the fire closes the #1 snap disc.

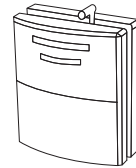


12. The convection blower will turn on.



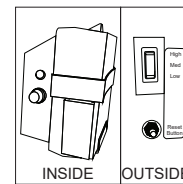
13. Room reaches temperature

14. Thermostat will turn off.

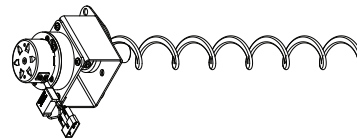


THERMOSTAT

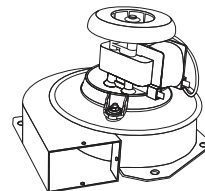
15. The red call light will turn off.



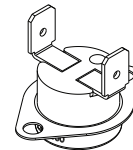
16. Feed motor will turn off.



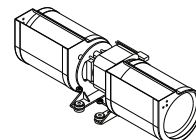
17. The exhaust blower will start a 18 minute countdown.



18. The #1 snap disc cools off



19. The convection blower shuts off



20. The end of the cycle; the appliance is now ready for another call for heat.

# 2 Basic Troubleshooting & Repair

## A. Plug in stove with no response

1. Check the power supply for 115 volts
2. Check the fuse in the junction box (7amps)
3. Check snap disc #3 for power
4. Check control box

## B. Call light on with no fire and no fuel in fire pot

1. Check hopper for bridging of pellets
2. Push reset button and adjust feed adjustment plate
3. Check thermocouple
4. Check venting system for obstructions
5. Check vacuum switch and vacuum hose
6. Check feed motor
7. Check exhaust blower

## C. Call light on with no fire and partially burned fuel in fire pot

1. Check firepot and clean
2. Check thermocouple
  - **Green light** - 2.7 mV ( $\pm 0.5$ mV)
  - **Red light** - 12.1 mV ( $\pm 1$ mV)
3. Check initial feed time (54 - 60 seconds)

## D. Call light is on with no fire and fuel in the fire pot

1. Check firepot for "clinker" material
2. Clean firepot
3. Check igniter
4. Check control box

## E. Slow or smoky start-up

1. Clean firepot
2. Feed adjustment plate may be set too high
3. Check exhaust blower and heat exchanger

## F. Stove Runs for 18 minutes then stops feeding fuel

1. Check thermocouple
  - **Green light** - 2.7 mVDC ( $\pm 0.5$ mV)
  - **Red light** - 12.1 mVDC ( $\pm 1$ mV)
2. Adjust feed adjustment plate for larger fire
3. Check thermocouple cover
  - Cover needs to touch the end of the thermocouple wire
  - Cover should extend 1 inch into the firepot
4. Check the control box

## G. Feed system fails to start

1. Check front door and make sure it is closed
2. Check to see if the call light is on
3. Check the thermostat, #2 snap disc, and hopper switch
4. Check feed motor and vacuum switch
5. Check exhaust system for obstructions

## H. Thermostat will not start appliance

1. Check the power to the stove
2. Check the thermostat wires for continuity
3. Check the hopper switch
4. Check the reset button
5. Check the control box

## I. Appliance fails to shut off

1. Check the thermostat and thermostat wire
2. Check the junction box and wire harness
3. Check the control box

## J. Convection blower keep running or fails to start

1. Check the #1 snap disc
2. Check convection blower
3. Check for voltage to the #1 snap disc

## K. Appliance cycles on and off with the thermostat is always on

1. Check the control box
2. Check the vacuum switch or hopper switch
3. Check wiring for loose connections

## L. Large fire, ash build up and dirty glass

1. Check firepot, may need to be cleaned
2. Clean exhaust and heat exchanger system
3. Adjust feed adjustment plate in the hopper
4. Check control box feed times:

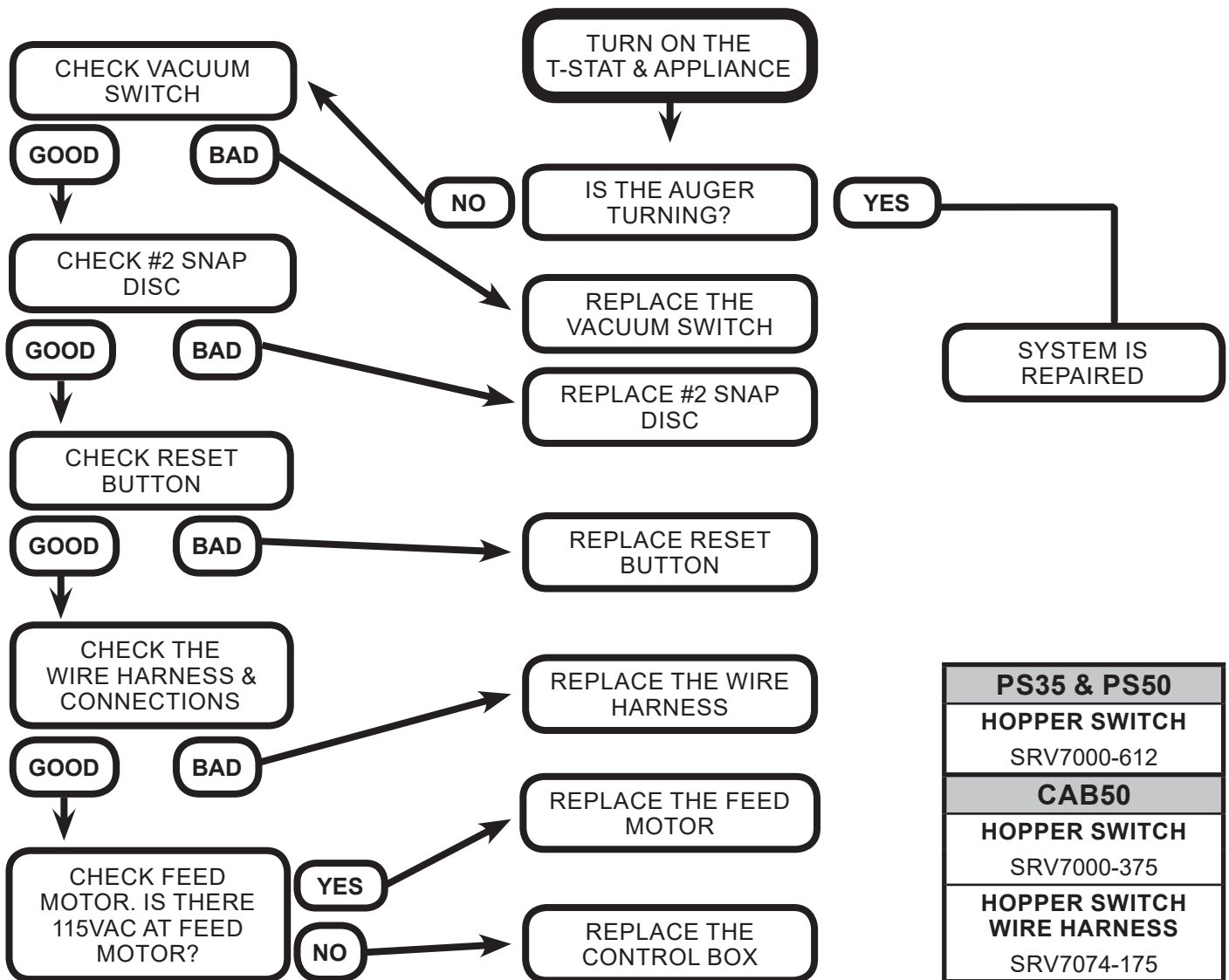
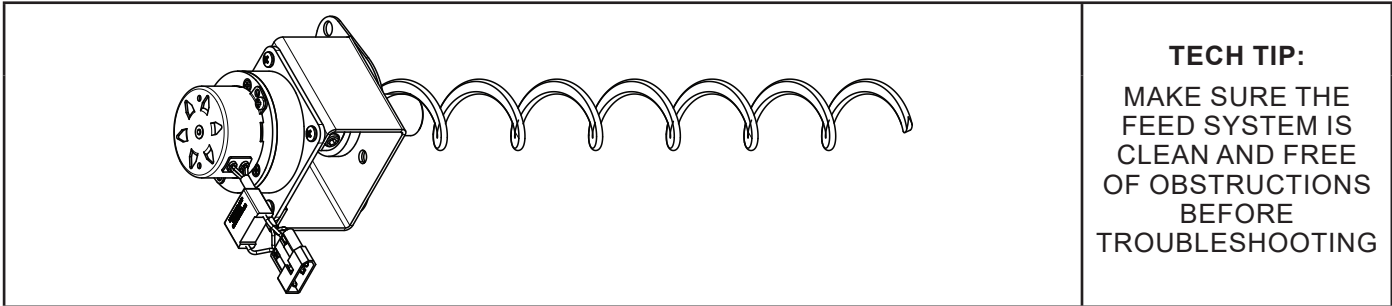
"ON" TIMES	PS35	PS50 & CAB50
SETTING	SECONDS	SECONDS
LOW	0.9	1.1
MEDIUM	1.6	1.9
HIGH	2.2	2.7

## M. Appliance ignites then goes out but call light is still on

"STOVE IS INCONSISTENT IN OPERATION"

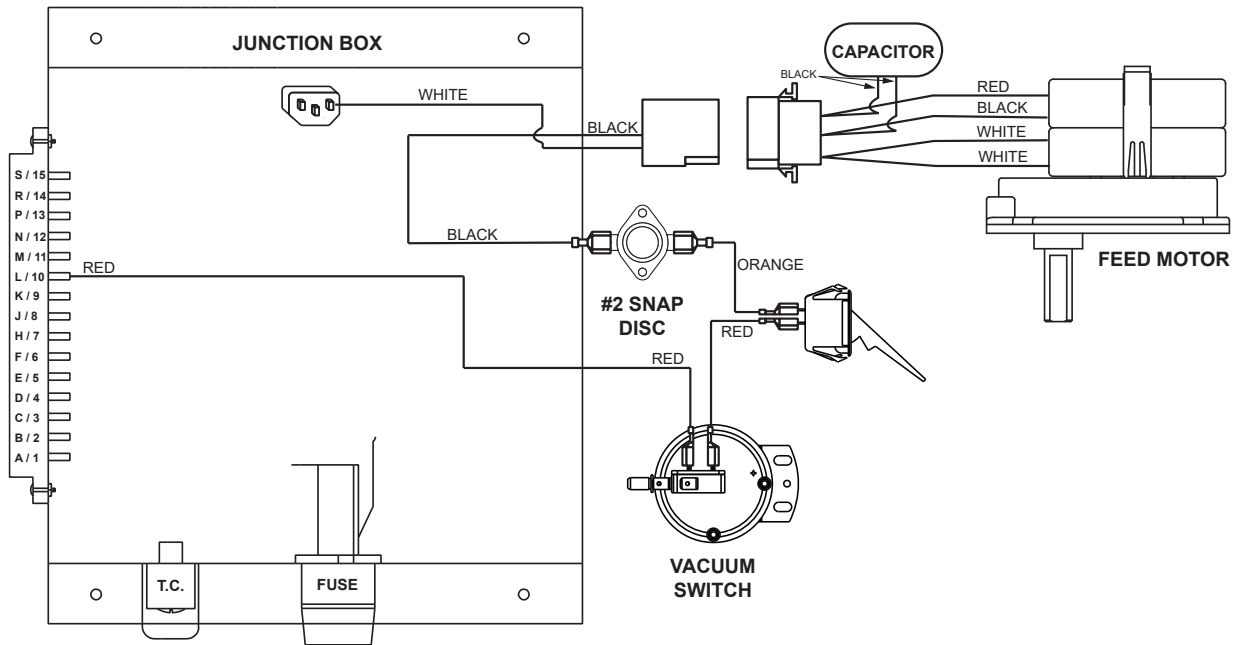
1. Inspect thermocouple and its position over the pot
2. Check the feed motor
3. Adjust feed adjustment plate for a larger fire
4. Check the exhaust and heat exchanger system
5. Check the vacuum switch

# 3 Feed System

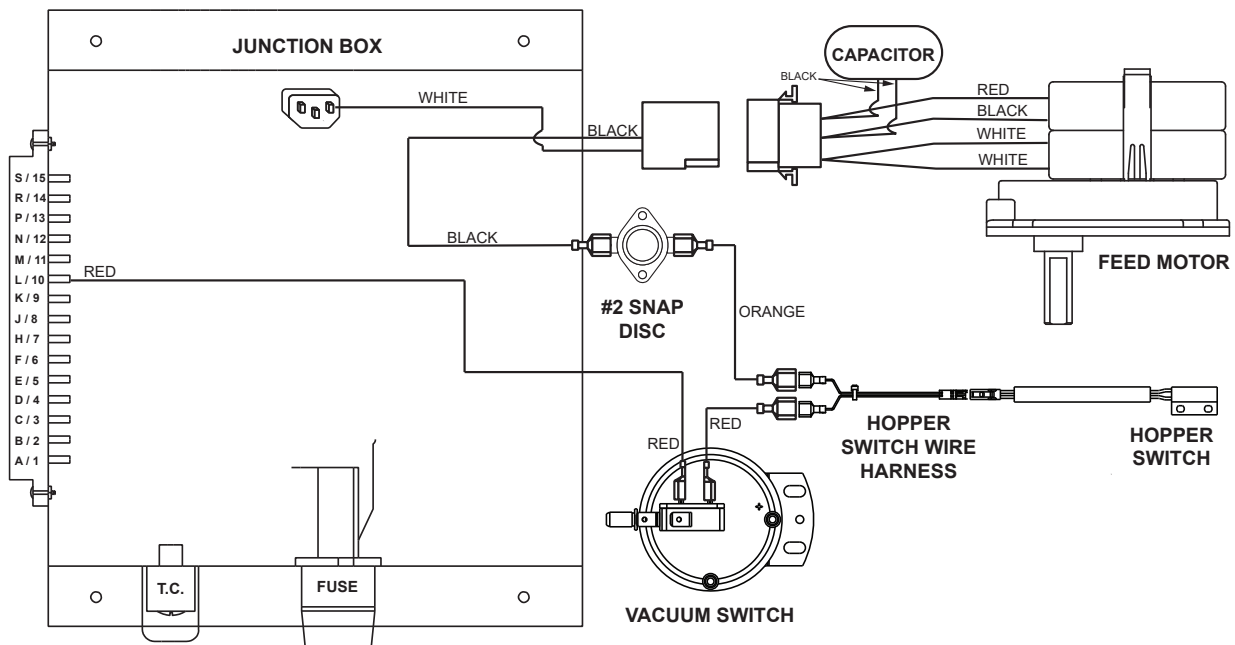


<b>PS35 &amp; PS50</b>
<b>HOPPER SWITCH</b> SRV7000-612
<b>CAB50</b>
<b>HOPPER SWITCH</b> SRV7000-375
<b>HOPPER SWITCH WIRE HARNESS</b> SRV7074-175

**PS35 & PS50 FEED MOTOR CIRCUIT**



**CAB50 FEED MOTOR CIRCUIT**

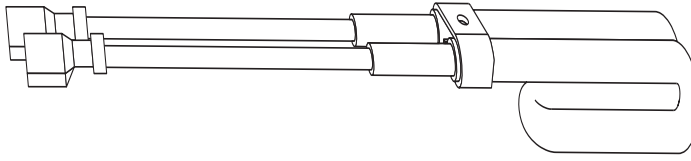


**FEED MOTOR TESTING WITH TEST BOX**

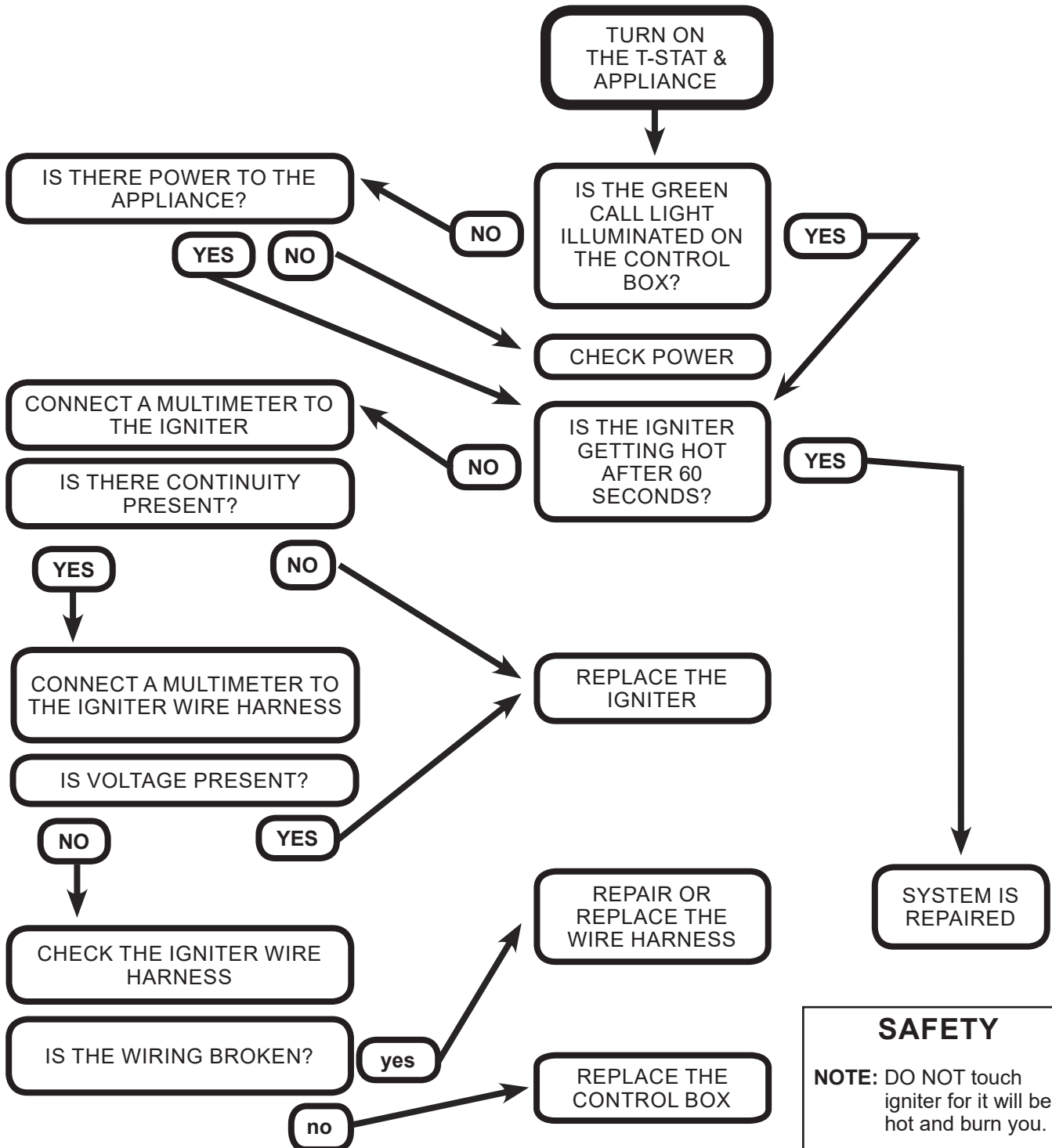
(IN CONJUNCTURE TO THIS SERVICE MANUAL USE THE INSTRUCTION SHEET FOR THE TEST BOX KIT)

1. Unplug the appliance, remove the control box, install the test box, and plug the appliance back in.
2. Turn on the exhaust blower switch; this will activate the vacuum switch to close.
3. Turn on the thermostat - the thermostat indicator light should come on.
4. Turn on the feed motor switch.
  - If the feed system does come on:
    - Replace the control box
  - If the feed system does not come on:
    - Check the feed motor
    - Check the vacuum switch
    - Check the #2 snap disc
    - Check the wire harness

# 4 Igniter



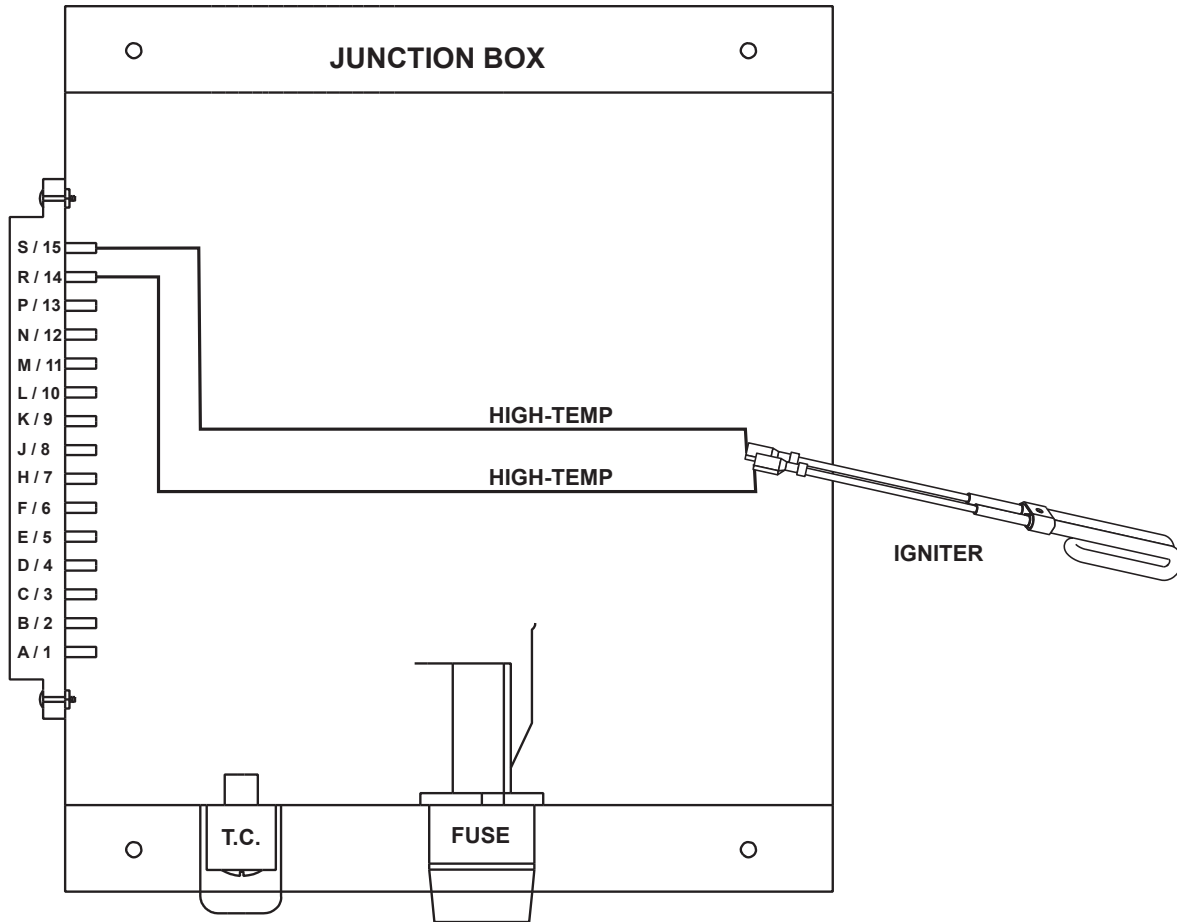
**TECH TIP:**  
MAKE SURE THE  
FIREPOT AND  
SURROUNDING  
AREA IS CLEAN  
BEFORE  
TROUBLESHOOTING



**SAFETY**  
**NOTE:** DO NOT touch igniter for it will be hot and burn you.



## IGNITER CIRCUIT

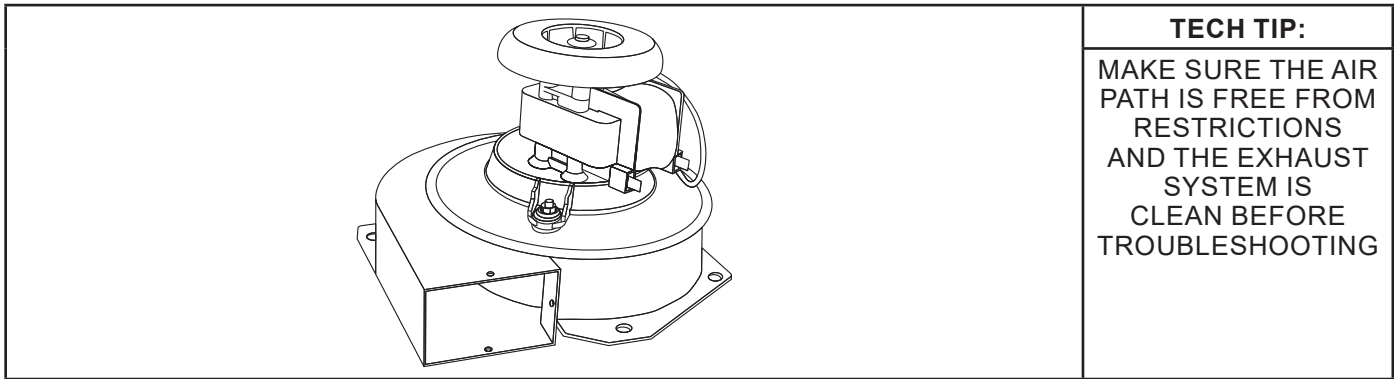


### IGNITER TESTING WITH TEST BOX

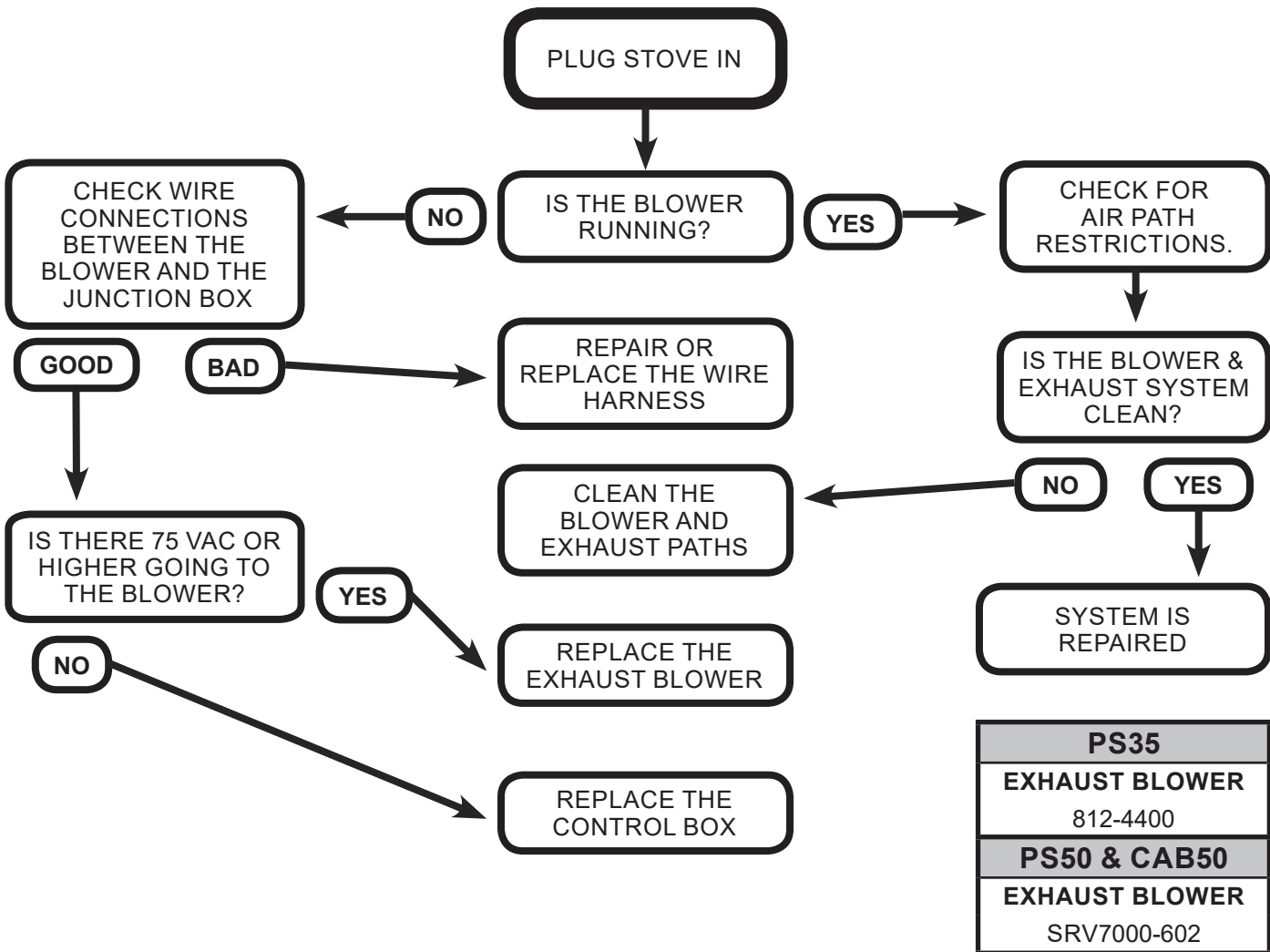
(IN CONJUNCTURE TO THIS SERVICE MANUAL USE THE INSTRUCTION SHEET FOR THE TEST BOX KIT)

1. Unplug the appliance, remove the control box, install the test box, and plug the appliance back in.
2. Turn on the thermostat switch (the thermostat indicator light should come on).
3. Turn the igniter switch on.
  - If the igniter comes on:
    - Replace the control box.
  - If the igniter does not come on:
    - Check the wire harness
    - Replace the igniter

# 5 Exhaust Blower

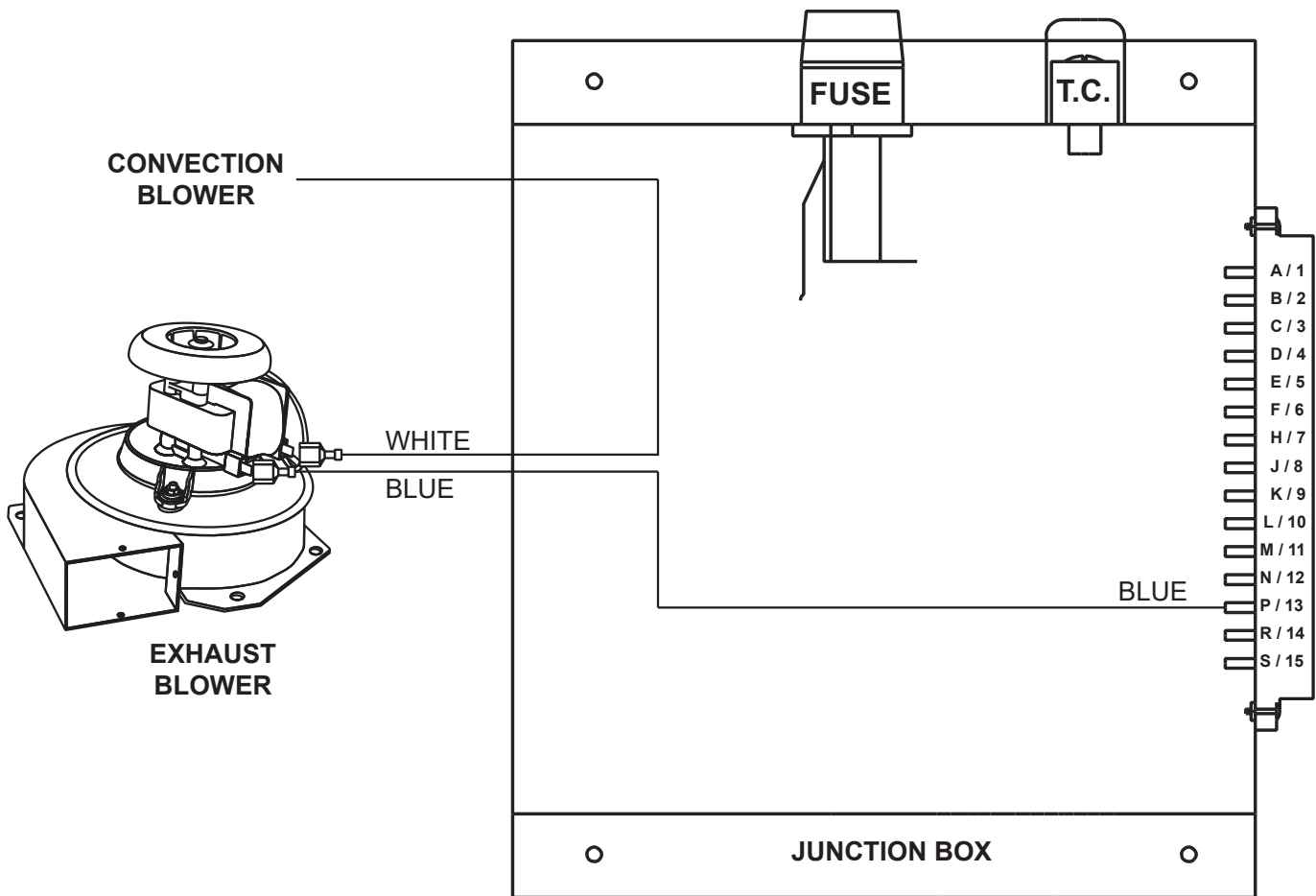


**TECH TIP:**  
 MAKE SURE THE AIR PATH IS FREE FROM RESTRICTIONS AND THE EXHAUST SYSTEM IS CLEAN BEFORE TROUBLESHOOTING



**NOTE:** OPEN CIRCUIT VOLTAGE IS MEASURED WITH THE BLOWER DISCONNECTED FROM THE WIRE HARNESS. CLOSED CIRCUIT VOLTAGE IS MEASURED WITH THE BLOWER HOOKED UP TO THE HARNESS. THE MEDIUM AND LOW VOLTAGES WILL BE 115 FOR THE FIRST 4:15 IF THE UNIT HAS THE NEW CONTROL BOX (PART # 230-2070).

## EXHAUST BLOWER CIRCUIT



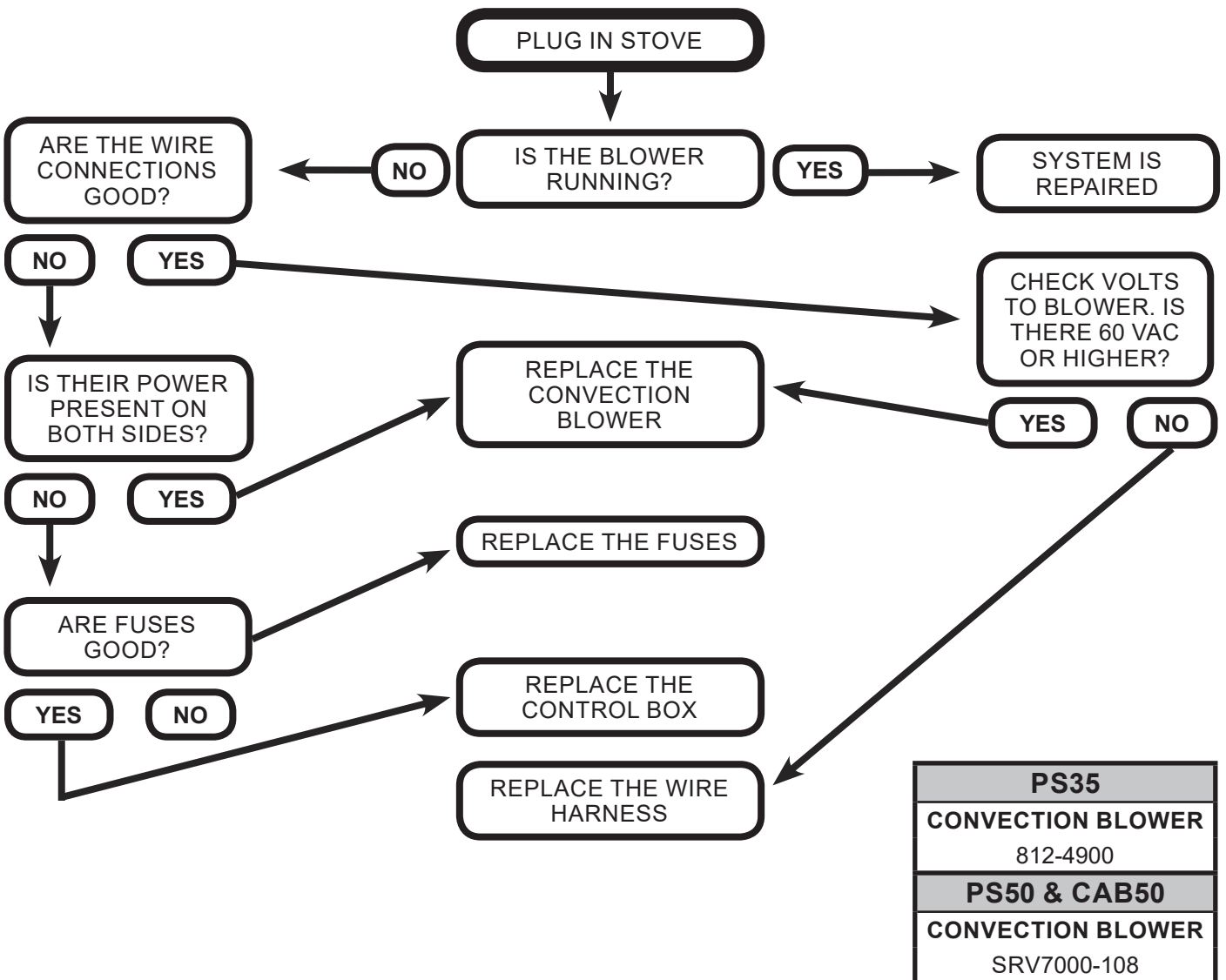
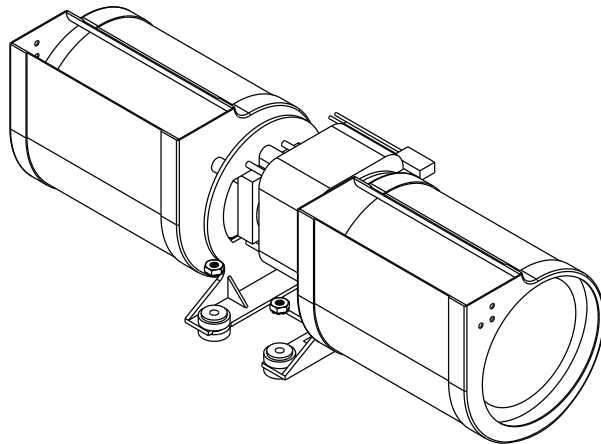
### EXHAUST BLOWER TESTING WITH TEST BOX

(IN CONJUNCTURE TO THIS SERVICE MANUAL USE THE INSTRUCTION SHEET FOR THE TEST BOX KIT)

1. Unplug the appliance, remove the control box, install the test box, and plug the appliance back in.
2. Turn on the thermostat switch (the thermostat indicator light should come on).
3. Turn the exhaust blower switch on.
  - If the blower comes on:
    - Replace the control box
  - If the blower does not come on:
    - Check the wire harness
    - Replace the blower

# 6 Convection Blower

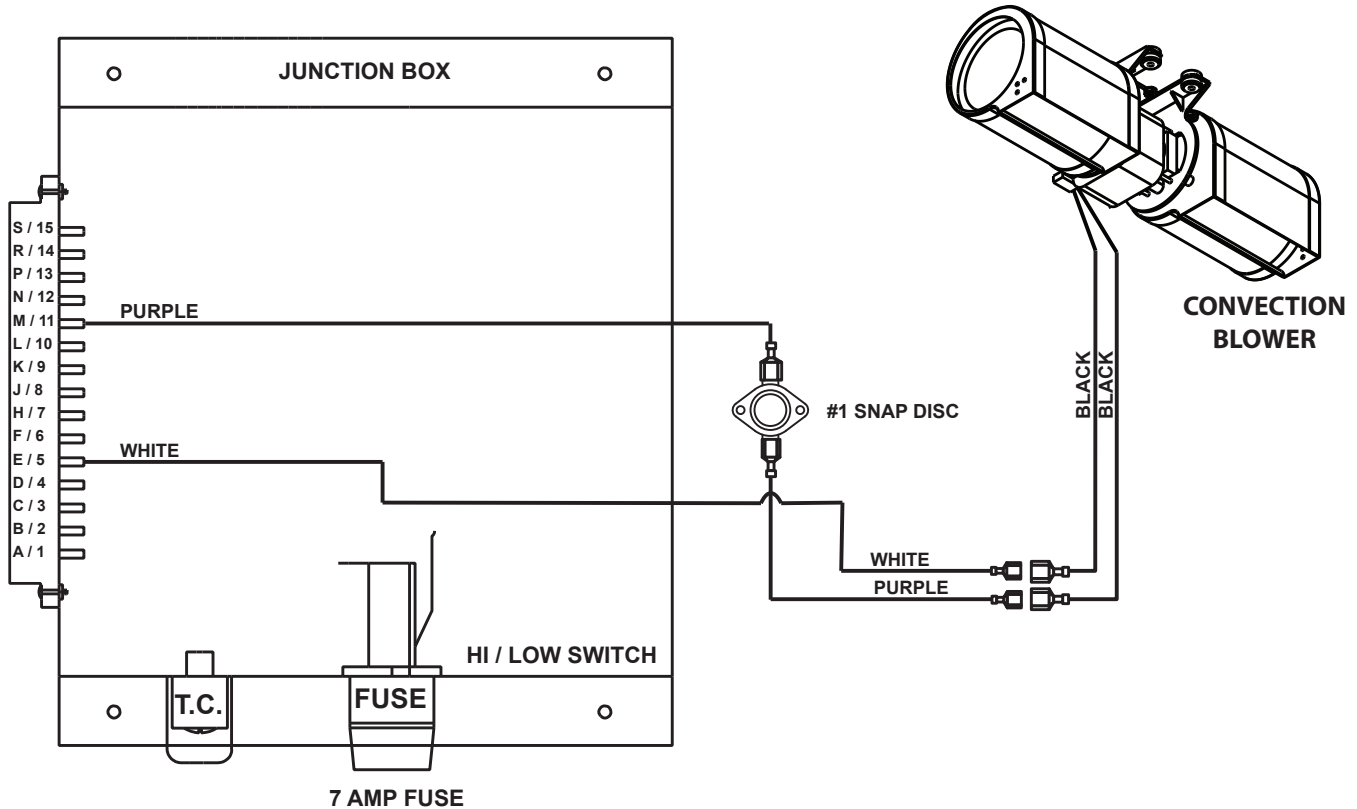
**TECH TIP**  
 INSTALLING A JUMPER WIRE ON THE #1 SNAP DISC PURPLE WIRES AND THEN PLUGGING IN THE APPLIANCE WILL TURN ON THE BLOWER



<b>PS35</b>
<b>CONVECTION BLOWER</b> 812-4900
<b>PS50 &amp; CAB50</b>
<b>CONVECTION BLOWER</b> SRV7000-108

**NOTE:** The volt meter must have one lead connected to the white neutral wire from the power supply to be able to read the correct voltage at the snap disc.

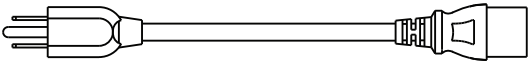
## CONVECTION BLOWER CIRCUIT

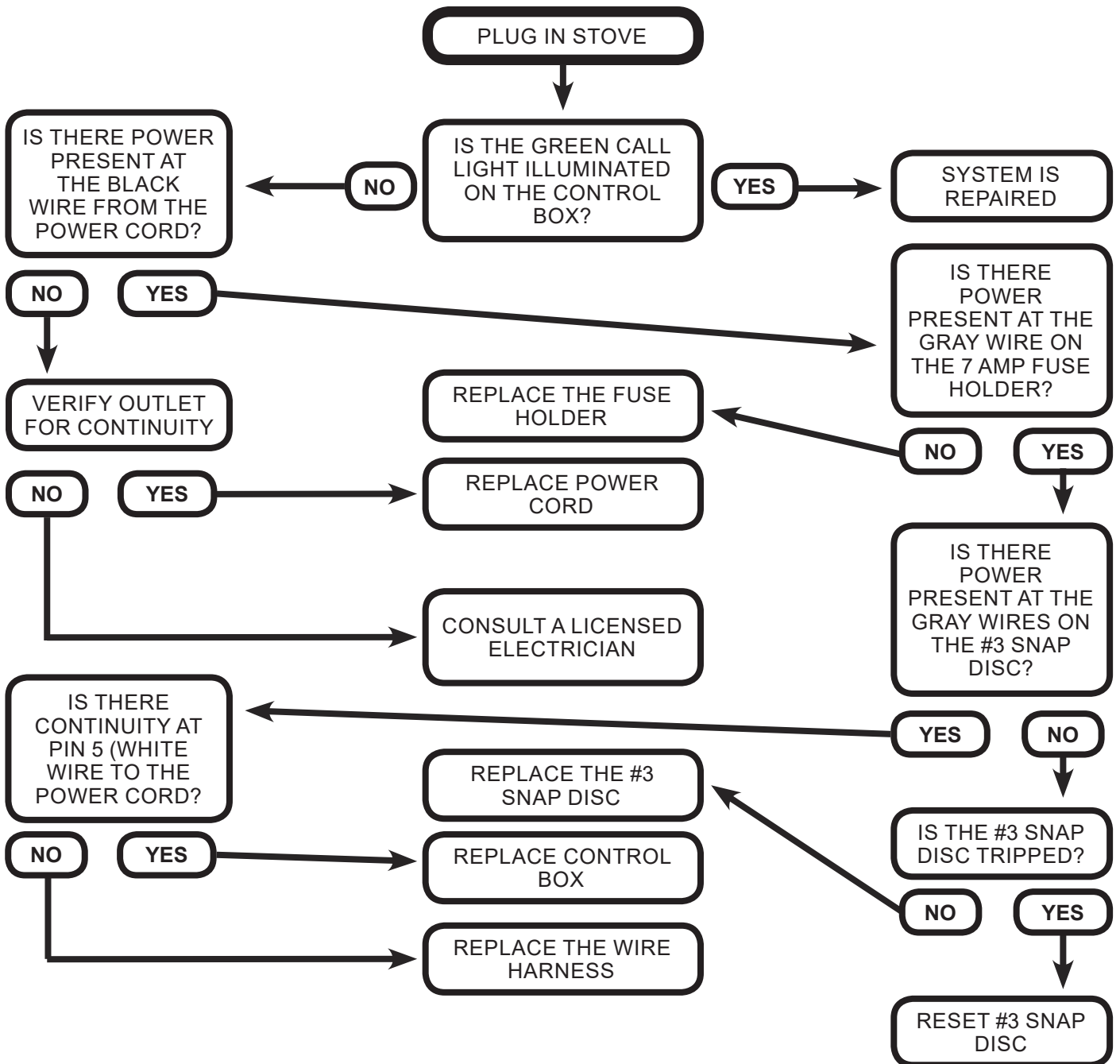
**CONVECTION BLOWER TESTING WITH TEST BOX**

(IN CONJUNCTURE TO THIS SERVICE MANUAL USE THE INSTRUCTION SHEET FOR THE TEST BOX KIT)

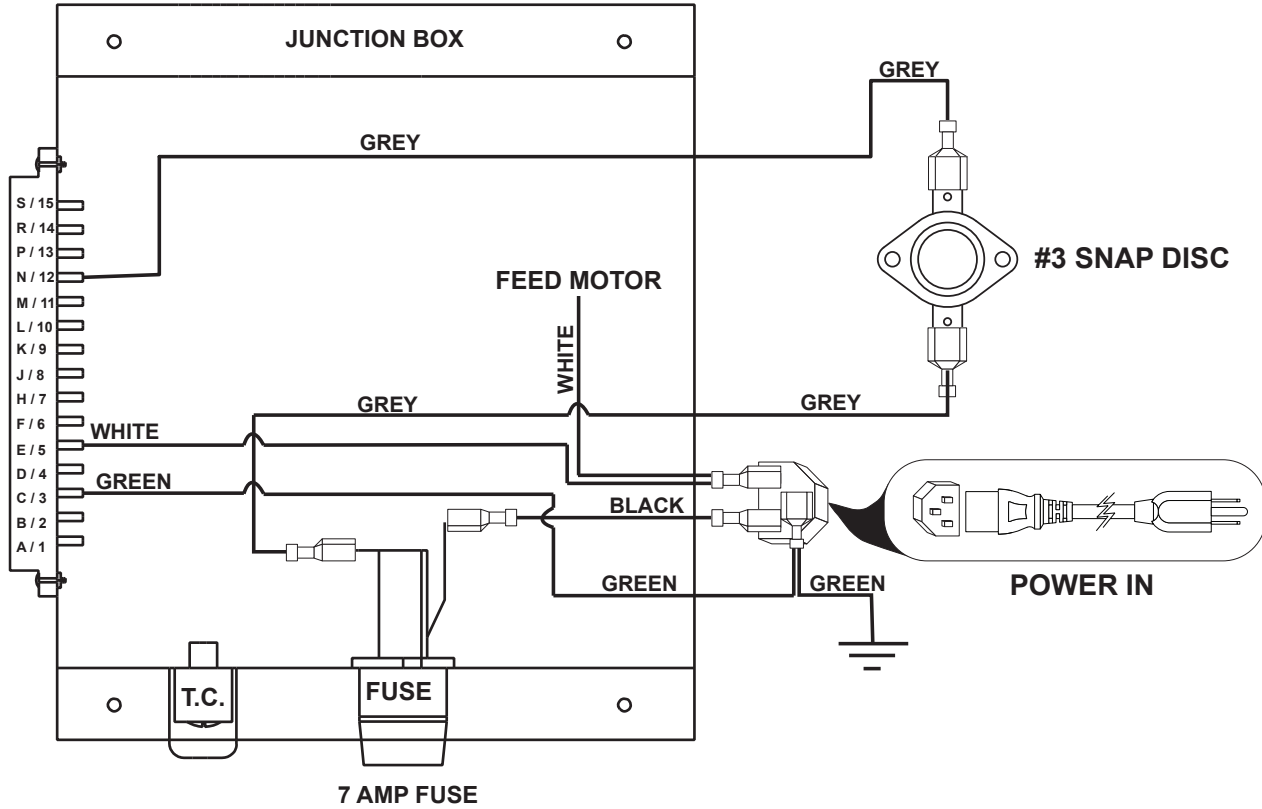
1. Unplug the appliance, remove the control box, install the test box, and plug the appliance back in.
2. Install a jumper wire onto the #1 snap disc purple wires and then plug in the appliance.
3. Turn on the convection blower switch.
  - If the blower comes on:
    - Replace #1 snap disc
    - Replace the control box
  - If the blower does not come on:
    - Check the wire harness
    - Replace the blower

# 7 Power Supply

<b>TECH TIP:</b>	
------------------	--



**POWER SUPPLY CIRCUIT**

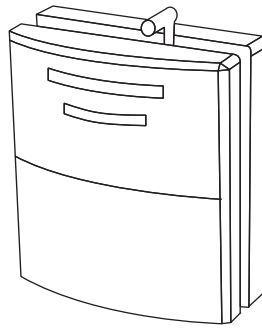


**TEST POWER SUPPLY FOR CONTINUITY**

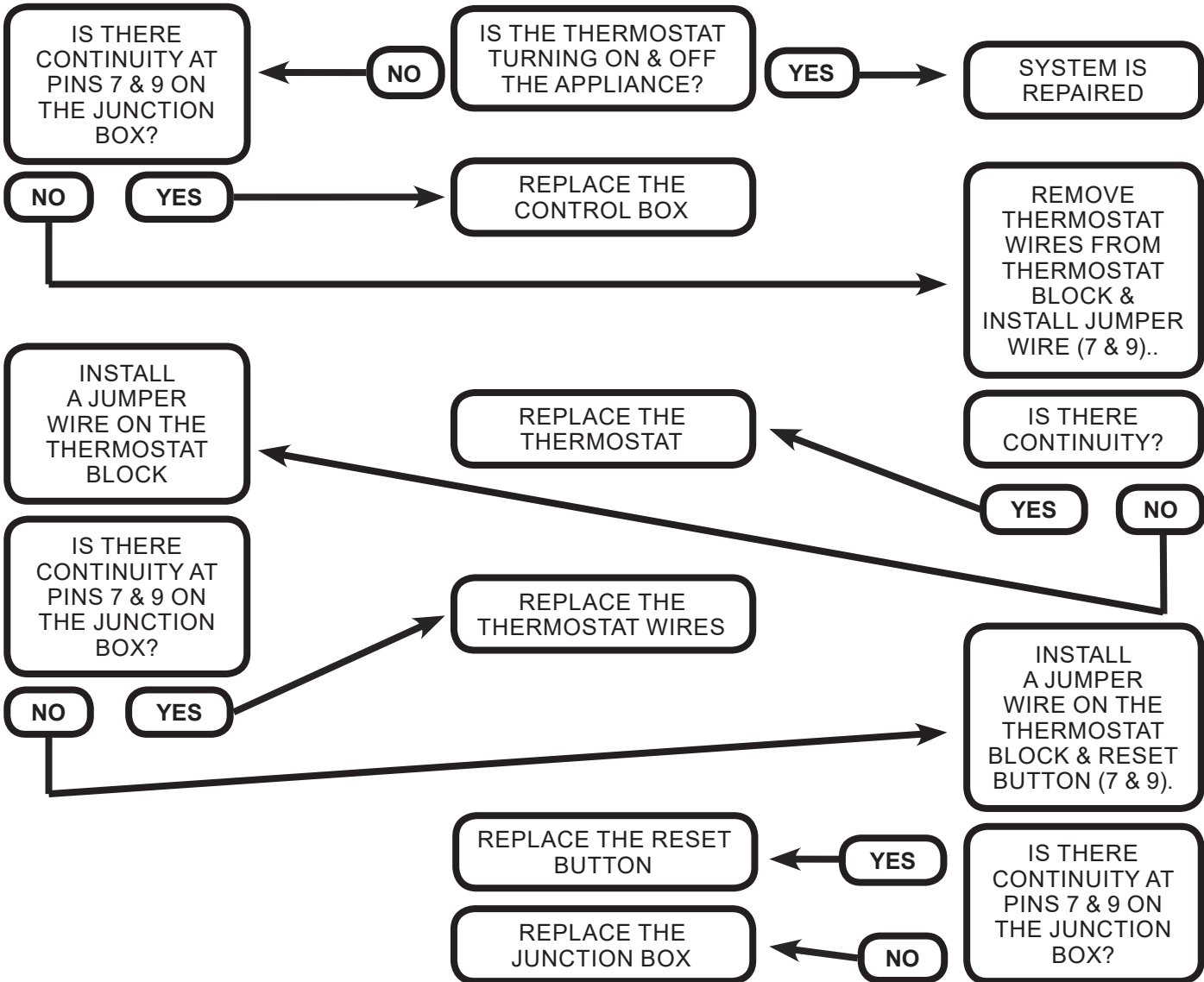
1. Unplug the power cord from the wall
2. Add a jumper wire on the end of the power cord.
3. Set the volt meter to OHMS and put the probes on pin 5 and pin 12 of the junction box.
  - If the circuit is complete, the reading should be "0"

# 8 Thermostat

**TECH TIP:**  
SUGGEST USING A JUMPER WIRE TO CLOSE CIRCUITS WITH THE TESTS POINTS (JUNCTION BOX, THERMOSTAT BLOCK, #2 SNAP DISC, AND RESET BUTTON).

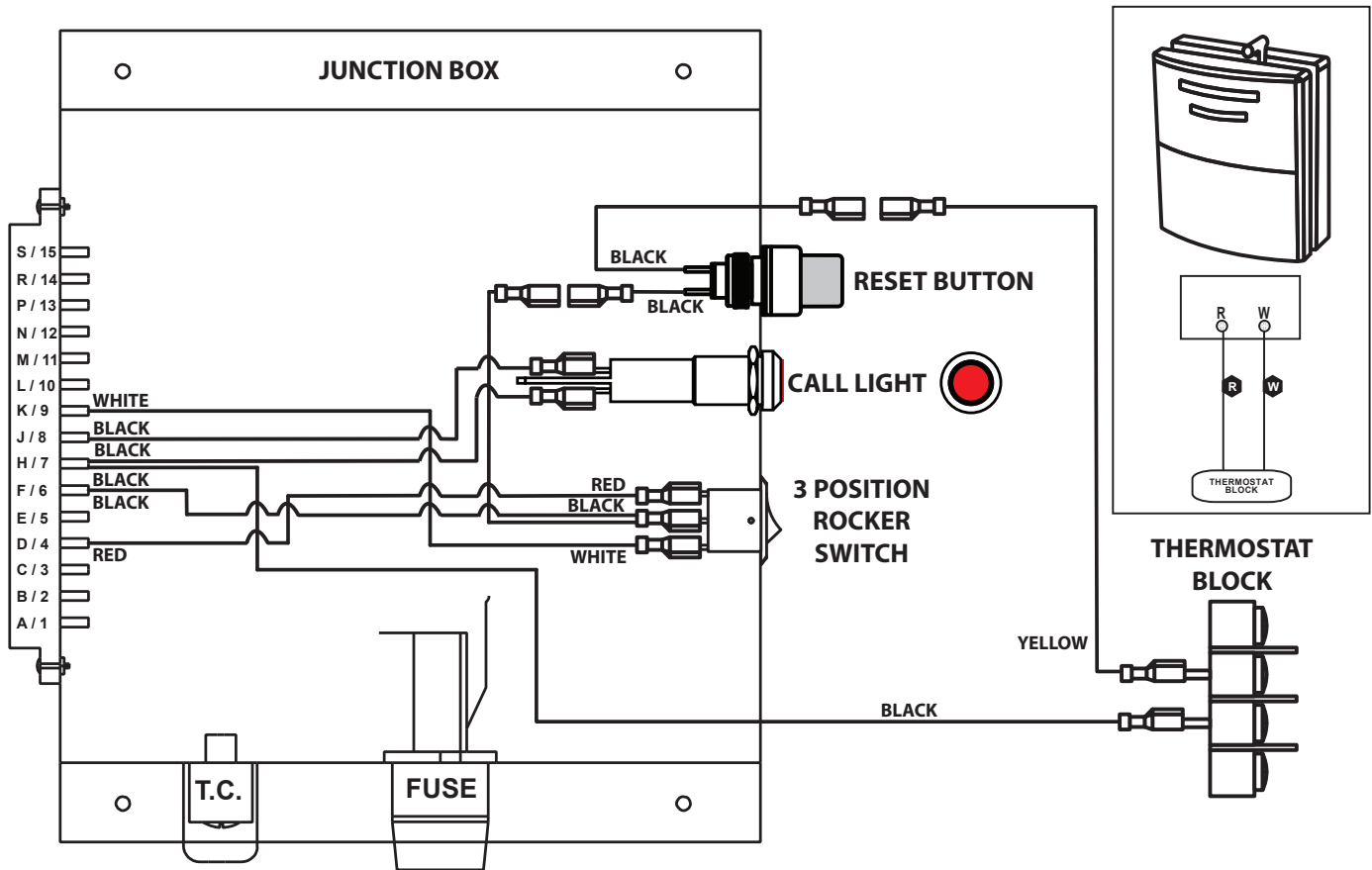


UNPLUG APPLIANCE, REMOVE CONTROL BOX, TURN ON THERMOSTAT, AND INSTALL JUMPER WIRE AT THERMOSTAT





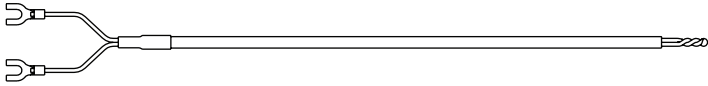
### THERMOSTAT CIRCUIT

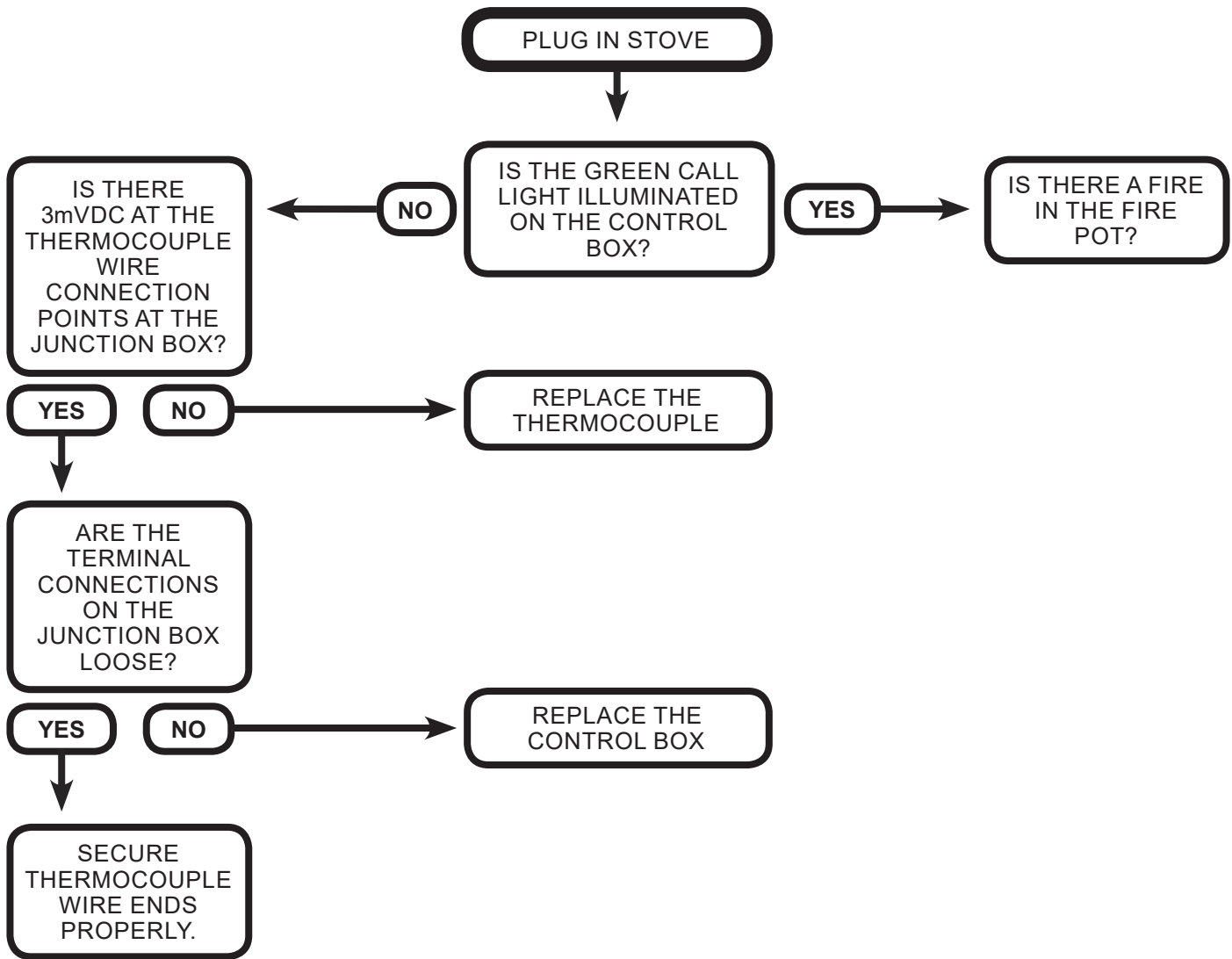


### TEST POWER SUPPLY FOR CONTINUITY

1. Unplug stove, remove control box, install test box & plug appliance back into power source.
2. Turn on the thermostat.
  - If the thermostat light comes on; replace the control box
  - If the thermostat light does not come on; refer to thermostat circuit troubleshooting on page 16.

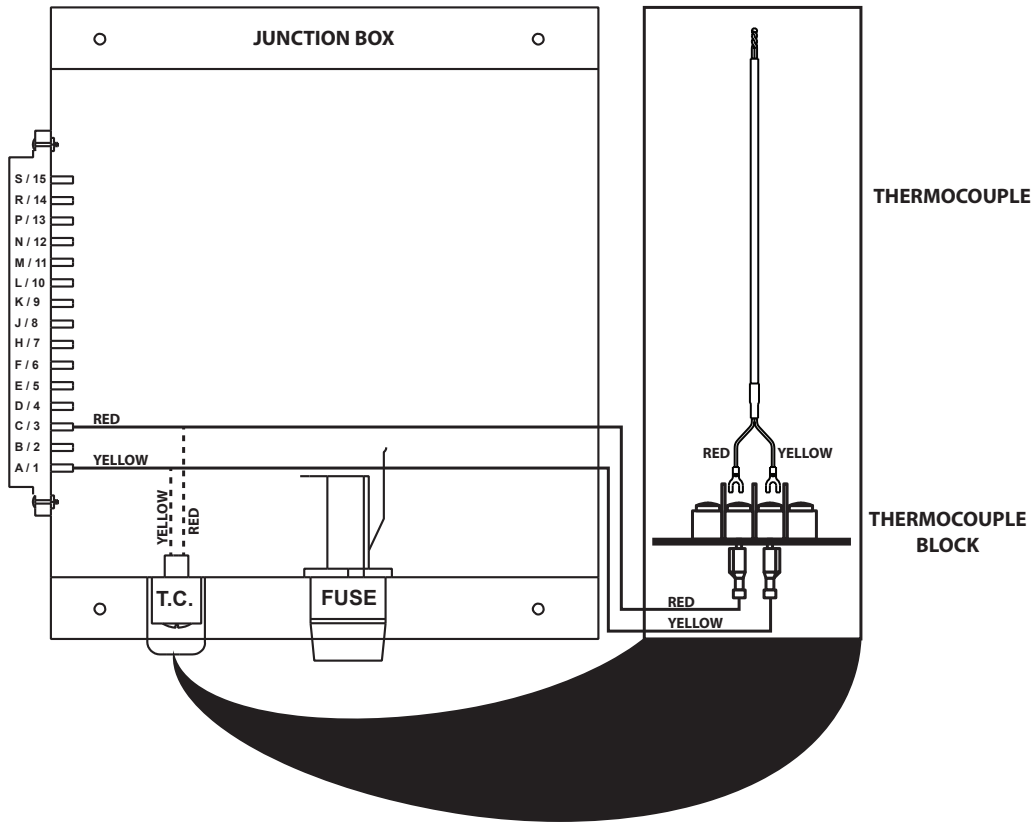
# 9 Thermocouple

<p><b>TECH TIP:</b> SET VOLT METER TO MILLIVOLTS (DC)</p>	
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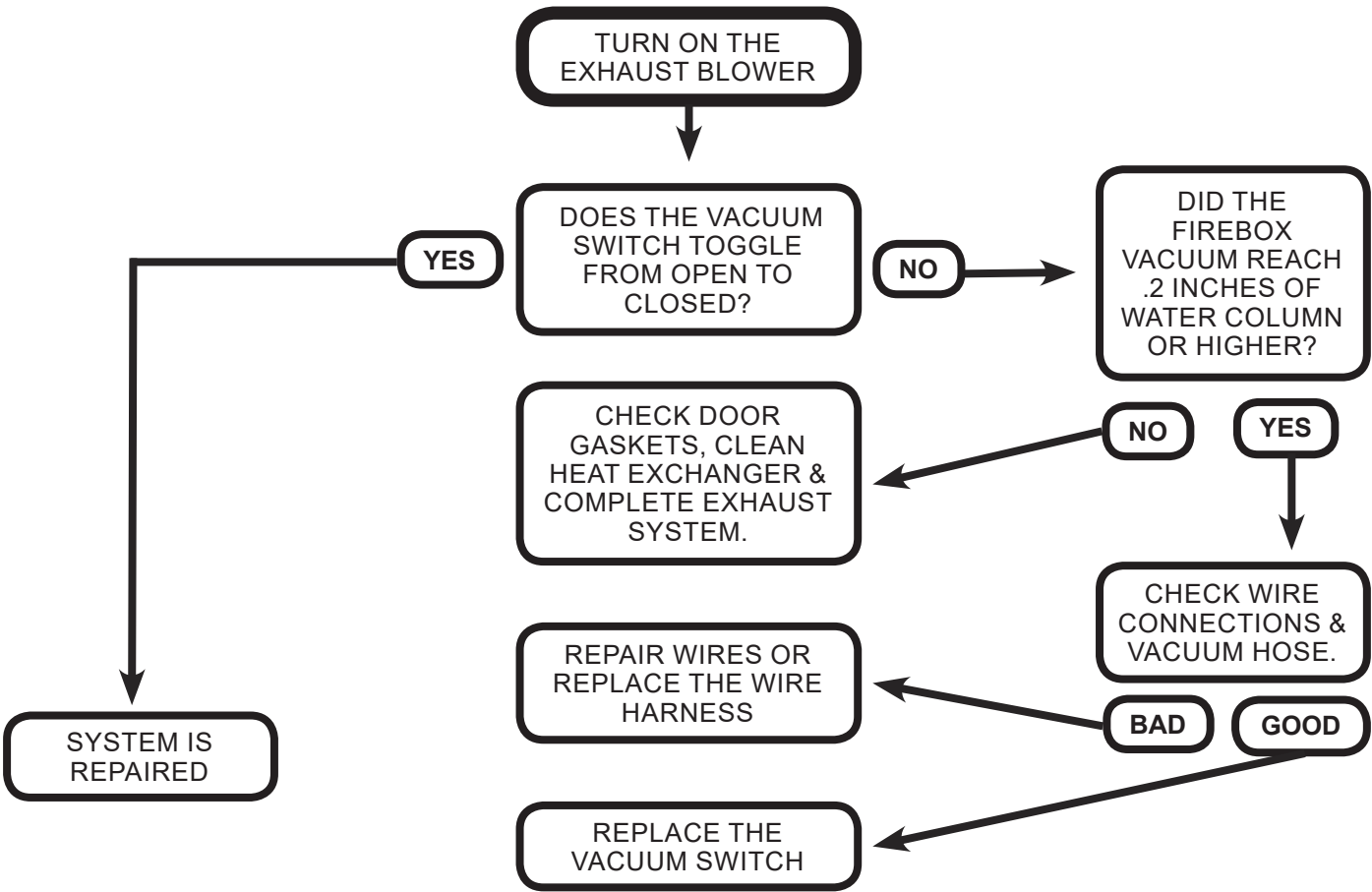
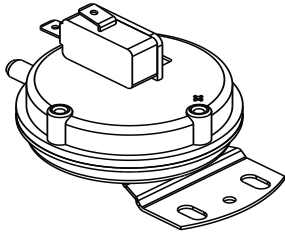
**NOTE:** The thermocouple is made up of two dissimilar metals that when joined together will produce a small amount of electricity when heat is applied. The hotter the fire the higher the voltage produced; topping out at 30 millivolts (DC) while the stove is burning on high. The function of the thermocouple is to sense the temperature in the fire pot; if the thermocouple is fractured, it will not produce voltage.

THERMOCOUPLE CIRCUIT

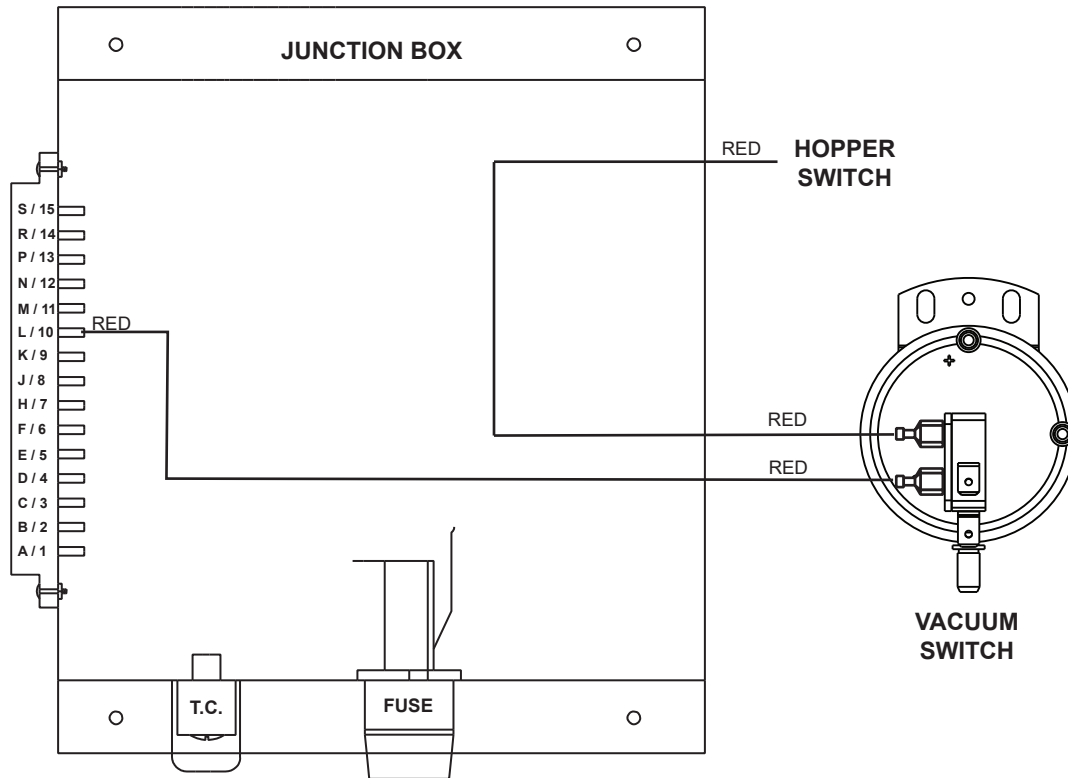


# 10 Firebox Vacuum & Vacuum Switch

**TECH TIP:**  
 Low vacuum can be the result of a leaking door gasket, fire pot not closing all of the way, dirty heat exchanger, or plugged vent system. Always make sure the unit is clean before making any repairs.



VACUUM SWITCH CIRCUIT



1. Install a vacuum "T" between the vacuum switch and drop tube.
2. Install the vacuum gauge to the "T".
3. Disconnect the connector for the hall sensor from the control board.

**NOTE:** This will allow the blower to run at MAX speed.

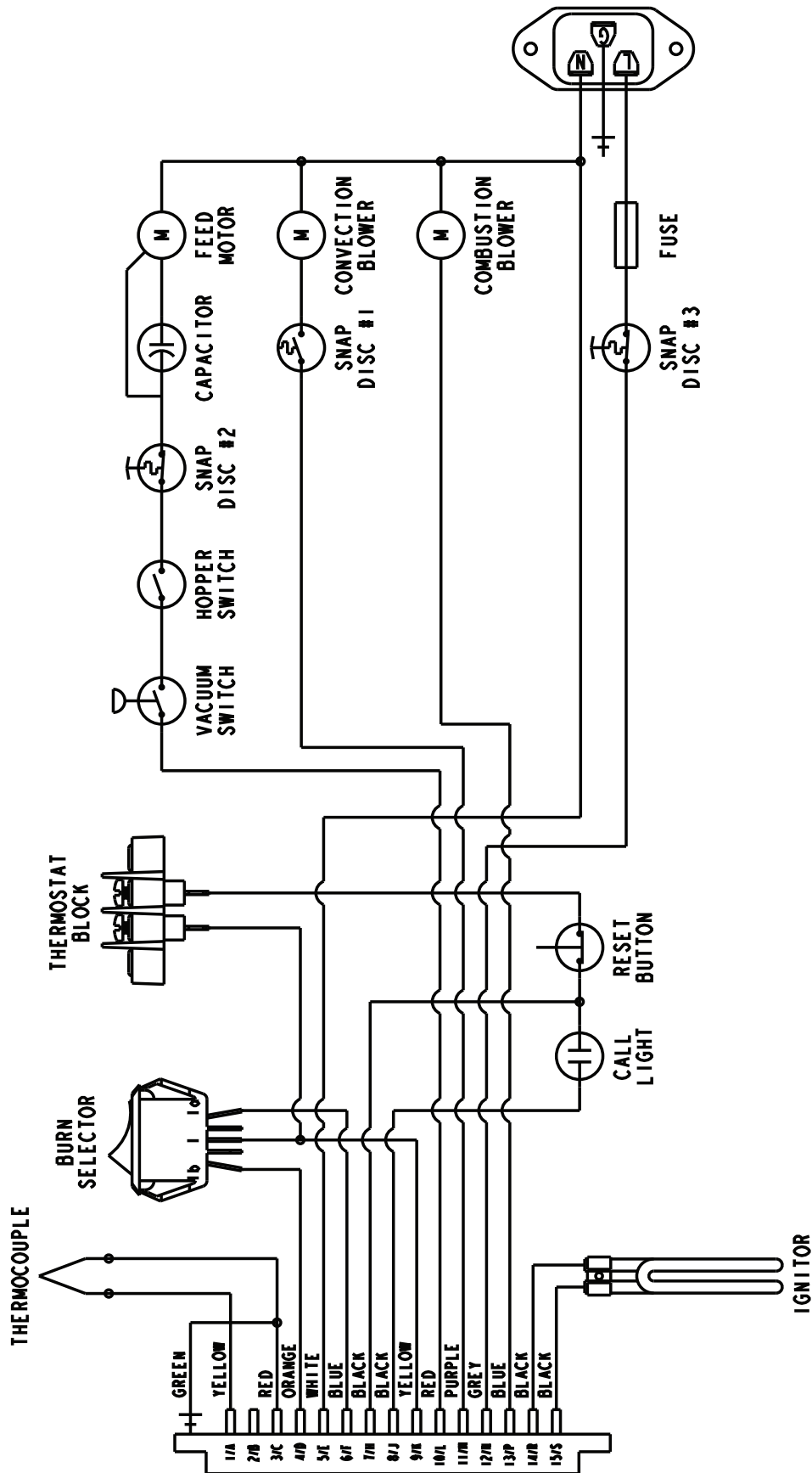
4. Turn thermostat on first, then appliance

**NOTE:** make sure fuel is in the hopper as this can effect the vacuum reading. It takes a minimum of .2 inches of water column to close the vacuum switch.

5. Your vacuum gauge should be reading between 0.2 to 0.3 inches of water column while the exhaust blower is running (on a cold stove and no fire).

All vacuum reading are measured in inches of water column; a long vertical vent run will produce a greater vacuum compared to a horizontal run.

# 11 Complete Wiring Diagram



# 12

## General Specifications

	PS35	PS50 & CAB50
<b>WATTS</b>		
EXHAUST BLOWER	37	60
CONVECTION BLOWER	60	78
IGNITER	380	380
FEED MOTOR	4	4
<b>AMPS</b>		
EXHAUST BLOWER	0.6	1.2
CONVECTION BLOWER	0.9	1.3
IGNITER	3.2	3.2
FEED MOTOR	0.03	0.03
<b>VOLTS ON HIGH FEED RATE SETTING (ALL COMPONENTS)</b>	115	115
<b>CONVECTION BLOWER VOLTS</b>		
MEDIUM	92	91
LOW	87	85
<b>EXHAUST BLOWER VOLTS</b>		
MEDIUM	92	92
LOW	86	85
<b>THERMOCOUPLE MILLIVOLTS</b>		
GREEN	2.7	2.7
RED	12.1	12.1
<b>THERMOCOUPLE CIRCUIT VOLTS</b>		
<b>BLOWER CFM</b>		
EXHAUST	45	70
CONVECTION	150	220
<b>BTU</b>		
<b>POUNDS PER HOUR BURN RATE</b>		
HIGH	4.1	5.8
MEDIUM	3.1	3.9
LOW	1.7	2.1
<b>FEED MOTOR "ON" TIMES</b>		
HIGH	2.2	2.7
MEDIUM	1.6	1.9
LOW	0.9	1.1
<b>FEED MOTOR RPM</b>	2	2
<b>HOPPER CAPACITY</b>	45	PS50: 80 CAB50: 120
<b>SNAP DISCS</b>		
#1 (CONVECTION)	F110-20	F110-20
#2 (OVER HEAT & SHUTS OFF FEED MOTOR; MANUAL RESET)	L175	L175
#3 (OVER HEAT & SHUTS OFF ALL POWER; MANUAL RESET)	L250	L250
<b>VACUUM (COLD STOVE ON THE HIGH SETTING, FUEL IN HOPPER)</b>	0.09 - 0.12 W.C.	0.12 - 0.16 W.C.

# 13 Exploded View & Service Parts

A. PS35-C

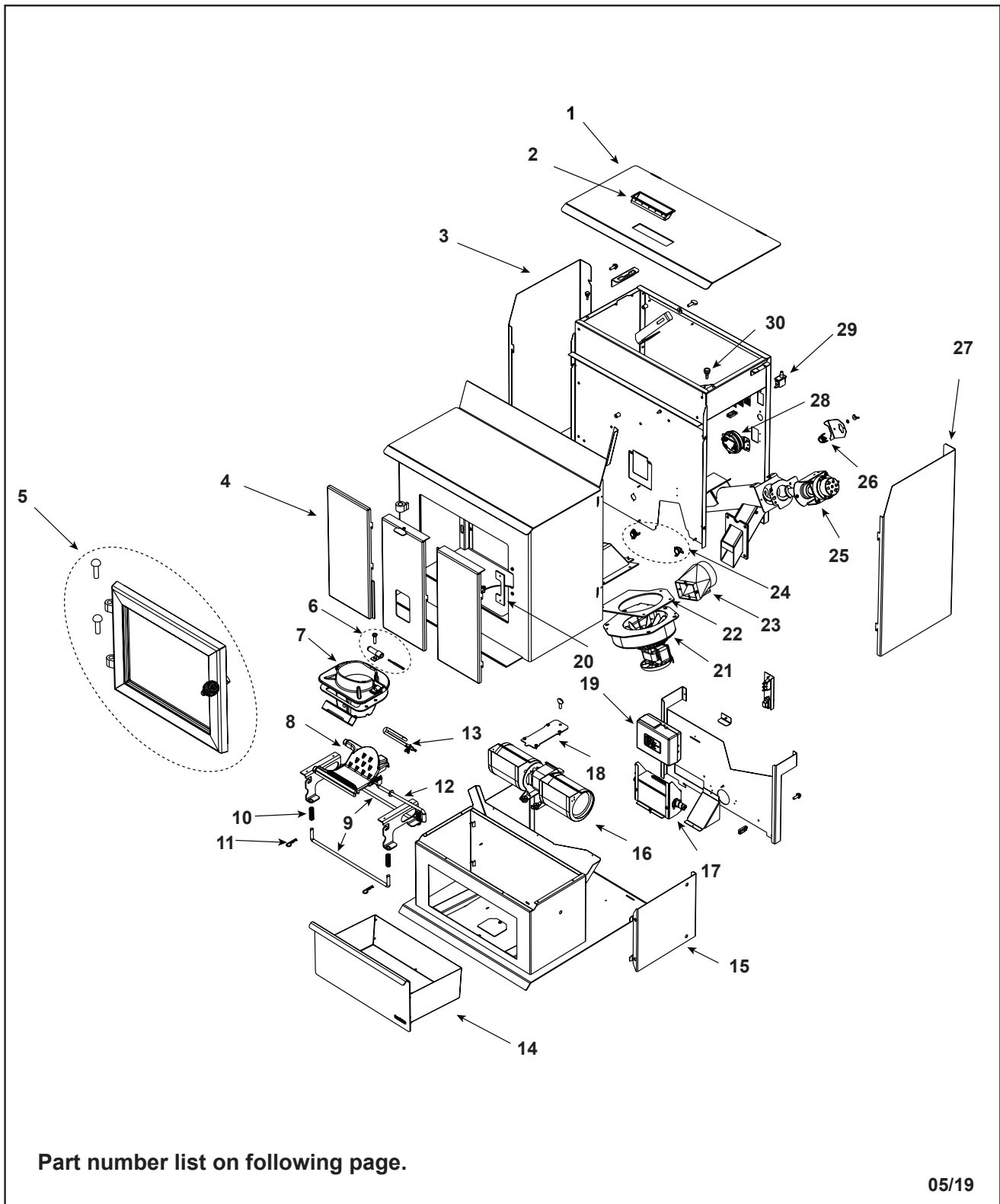


Service Parts

PS35-C

Free Standing Pellet Stove

Beginning Manufacturing Date: May 2019  
Ending Manufacturing Date: Active







Service Parts

PS35-C

Beginning Manufacturing Date: May 2019  
Ending Manufacturing Date: Active

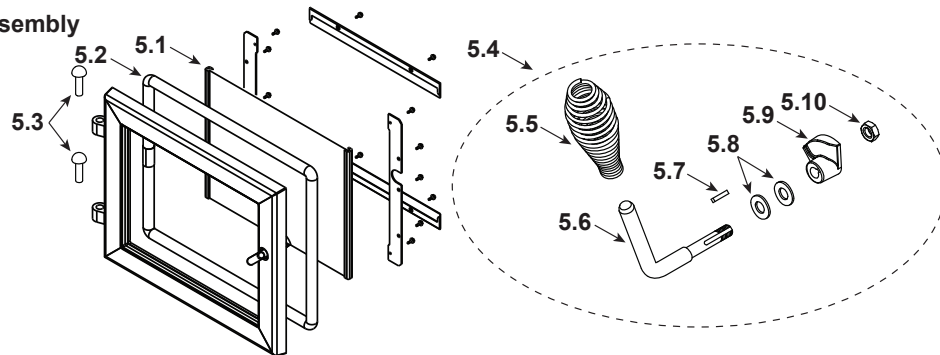


IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.

**Stocked at Depot**

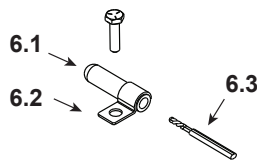
Item	Description	Comments	Part Number	Stocked at Depot
1	Hopper Lid Assembly		SRV7058-009	
2	Handle, Hopper Lid		SRV200-0110	
3	Side Curtain, Left		SRV7058-125	
4	Baffle Assembly		SRV7058-026	Y

#5 Door Assembly



5	Door Assembly		SRV7058-014	
5.1	Glass Assembly		SRV7058-015	Y
5.2	Rope, Door, 3/4" X 84"		832-1680	Y
	Corner Tape	1 Ft	SRV560-437-9	
	Gasket, Glass Tape, 3/4" X 1/8"	5 Ft	832-0460	Y
5.3	Hinge Pin, 1/2"	Nickel	SRV430-5320	
5.4	Door Handle Assembly		SRV7058-030	Y
5.5	Spring Handle, 1/2"	Black	250-8330	Y
5.6	Handle, Formed Door		SRV7058-182	
5.7	Key Latch, Cam		SRV430-1151	
5.8	Washer, SAE, 3/8 (Qty 2 req)	Pkg of 3	832-0990	Y
5.9	Cam Latch		SRV430-1141	
5.10	Nut, 2-Way Side-Lock Jam	Pkg of 24	226-0100/24	Y

#6 Thermocouple Assembly



6.1	Thermocouple Protection Tube		SRV7034-186	Y
		Pkg of 10	SRV7034-186/10	
6.2	Half Clip		7000-321	
6.3	Thermocouple		812-4470	Y

Additional service parts on following page



Service Parts

PS35-C

Beginning Manufacturing Date: May 2019  
Ending Manufacturing Date: Active

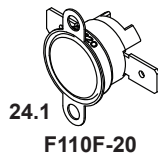
IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



Stocked at Depot

Item	Description	Comments	Part Number	Stocked at Depot
7	Firepot Assembly		SRV7034-072B	Y
	Gasket, Firepot		SRV7034-190	Y
8	Firepot Bottom		SRV7034-153	Y
9	Rail, Auto-Clean		SRV7034-152	Y
10	Spring	Pkg of 4	7000-513/4	Y
11	Hitch Pin Clip 3/32	Pkg of 10	7000-374/10	Y
12	Pull Rod		SRV7058-141	
13	Heating Element Assembly 18" (Loop Igniter)	Pkg of 1	SRV7000-462	Y
		Pkg of 10	SRV7000-462/10	Y
14	Ash Pan Assembly		SRV7058-013	
	Heatilator Logo		4021-049	
15	Pedestal Side	Qty 2 req	SRV7058-153	
16	Blower, Convection		812-4900	Y
17	Wire Harness		SRV7058-150	Y
	Fuse, 7 Amp, Junction Box	Pkg of 10	812-0380/10	Y
	Reset Button Assembly		SRV7000-040	
18	Blower Retainer		SRV7058-148	
19	Control Board 3 Speed Eco-Choice		SRV7058-188	Y
20	Latch Backing Plate		SRV7058-155	
21	Blower, Exhaust Combustion		812-4400	Y
22	Gasket, Exhaust Combustion Blower		SRV240-0812	Y
	Gasket, Combustion Blower, Round		812-4710	Y
23	Casting, Exhaust Transition		180-0190	

Snap Disc's



24	Snap discs			
24.1	Snap Disc, 110-20 ( #1 )	Right	SRV230-1220	Y
24.2	Snap Disc Manual Reset ( #2 )	Left	SRV230-1960	Y
25	Feed Assembly		SRV7058-007	Y
	Feed Bearing		SRV7000-598	Y
	Feed Motor		812-4421	Y
	Feed Spring Assembly (Only)		SRV7001-046	Y
	Gasket, Feed Motor		SRV7034-144	
26	Snap Disc ( #3 )		SRV230-1290	Y

Additional service parts on following page.



## Service Parts

**PS35-C**

Beginning Manufacturing Date: May 2019

Ending Manufacturing Date: Active

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



<b>Stocked at Depot</b>
-------------------------

Item	Description	Comments	Part Number	
27	Side Curtain, Right		SRV7058-124	
28	Vacuum Switch		SRV7000-531	Y
	Hose, Vacuum, 5/32 Id	3 Ft	SRV240-0450	Y
29	Hopper Switch		SRV7000-612	Y
30	Bumper, Rubber	Pkg of 12	SRV224-0340/12	Y
	Baffle Center Back		SRV7058-166	
	Component Pack		SRV7058-062	
	Cleanout Tool		414-1140	Y
	Harness, Thermostat Wire		230-0810	
	Power Cord		812-1180	Y
	Thermostat Mechanical		812-3760	Y
	Touch-Up Paint		3-42-19905	
<b>ACCESSORIES</b>				
	Collar, Offset, Top Vent		812-3570	
	Damper ,3"	For Tall Vertical Runs Only	PEL-DAMP3	Y
	Damper, 4"		PEL-DAMP4	
	Outside Air Kit, 2"		811-0872	
	Hose, Alum Flex, 2 Inch X 3 Ft	3 Ft	SRV200-0860	
	Outside Air Cap Assembly		7001-044	
	Outside Air Collar Assembly		SRV7001-045	
	Trim Plate, Outside Air Kit		412-7100	
	Pull Rod Handle		PULLROD-HNDL	
	Smart-Batt II		841-0970	
	Smart-Stat II		841-0960	
	Top Vent Adapter		TPVNT-5	
	Component Pack		SRV7058-054	
	Vent Adapter, 3-4"		811-0720	
	Vent Adapter, 90, Cleanout		TPVNT-6	



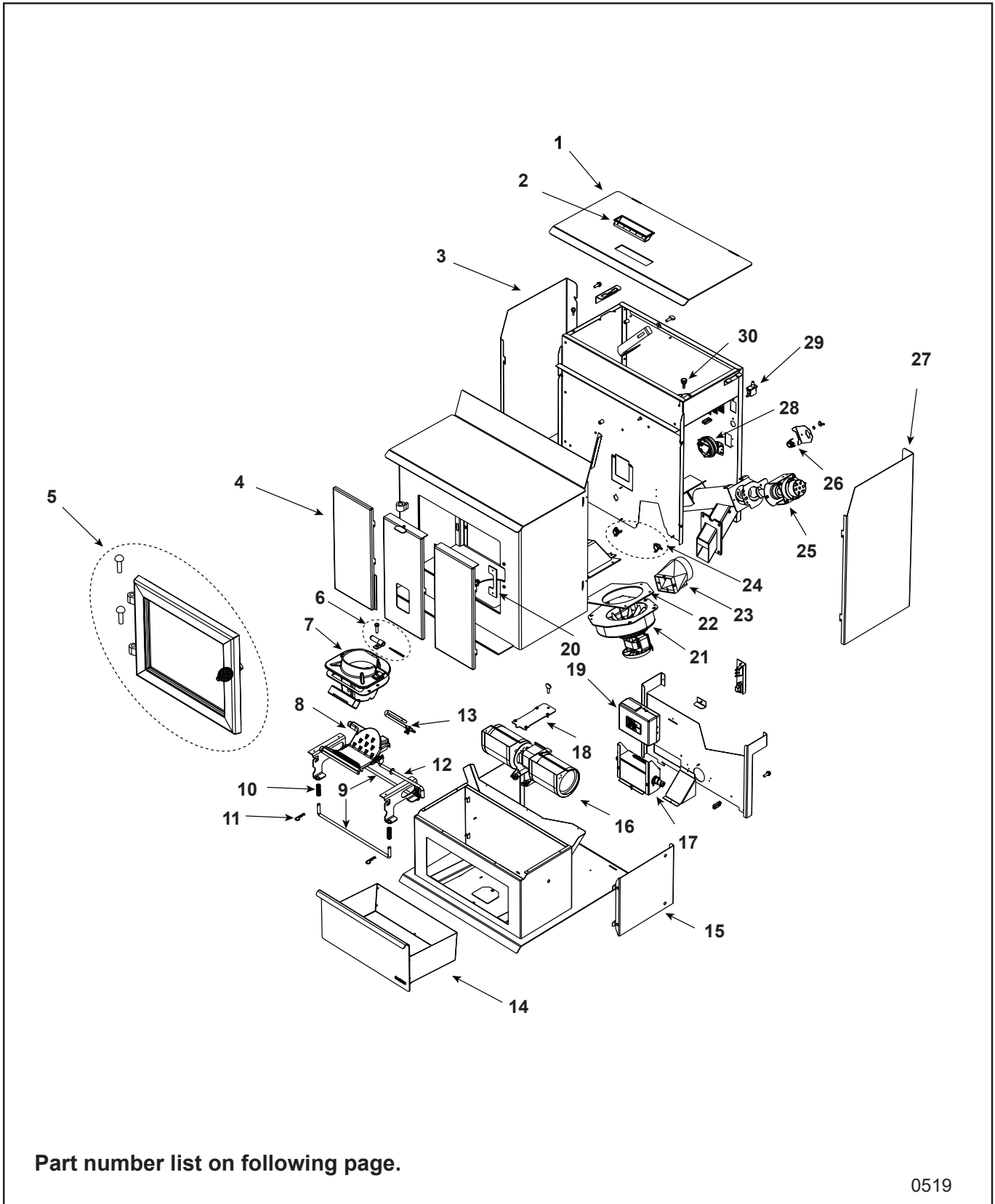
B. PS50-C



**Service Parts**  
Free Standing Pellet Stove

**PS50-C**

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active



Part number list on following page.

0519



Service Parts

PS50-C

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

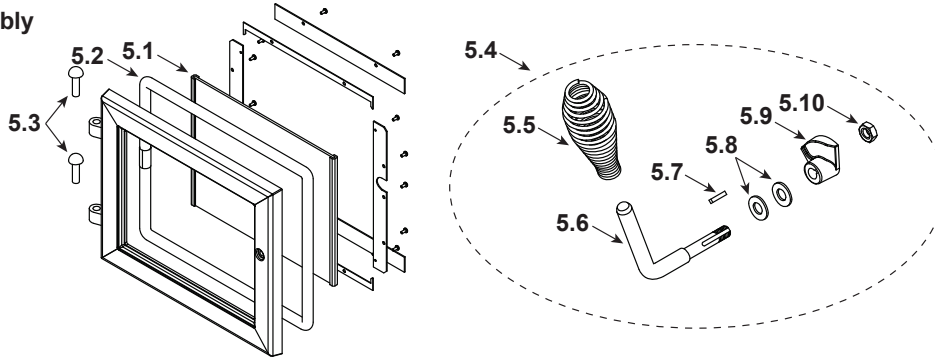
IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



Stocked at Depot

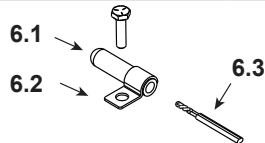
Item	Description	Comments	Part Number	Stocked at Depot
1	Hopper Lid Assembly		SRV7059-009	
2	Handle, Hopper Lid		SRV200-0110	
3	Side Curtain, Left		SRV7059-125	
4	Baffle Assembly		SRV7059-026	Y

Door Assembly



5	Door Assembly		SRV7058-014	
5.1	Glass Assembly		SRV7058-015	Y
5.2	Rope, Door, 3/4" X 84"		832-1680	Y
	Corner Tape	1 Ft	SRV560-437-9	
	Gasket, Glass Tape, 3/4" X 1/8"	5 Ft	832-0460	Y
5.3	Hinge Pin, 1/2"	Nickel	SRV430-5320	
5.4	Door Handle Assembly		SRV7058-030	Y
5.5	Spring Handle, 1/2"	Black	250-8330	Y
5.6	Handle, Formed Door		SRV7058-182	
5.7	Key Latch, Cam		SRV430-1151	
5.8	Washer, SAE, 3/8 (Qty 2 req)	Pkg of 3	832-0990	Y
5.9	Cam Latch		SRV430-1141	
5.10	Nut, 2-Way Side-Lock Jam	Pkg of 24	226-0100/24	Y

Thermocouple Assembly



6.1	Thermocouple Protection Tube		SRV7034-186	Y
		Pkg of 10	SRV7034-186/10	
6.2	Half Clip		7000-321	
6.3	Thermocouple		812-4470	Y
7	Firepot Assembly		SRV7034-072B	Y
	Gasket, Firepot		SRV7034-190	Y
8	Firepot Bottom		SRV7034-153	Y

Additional service parts on following page



Service Parts

PS50-C

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

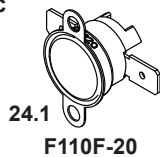
IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



Stocked at Depot

Item	Description	Comments	Part Number	Stocked at Depot
9	Rail, Auto-Clean		SRV7034-152	Y
10	Spring	Pkg of 4	7000-513/4	Y
11	Hitch Pin Clip 3/32	Pkg of 10	7000-374/10	Y
12	Pull Rod		SRV7058-141	
13	Heating Element Assembly 18" (Loop Igniter)	Pkg of 1	SRV7000-462	Y
		Pkg of 10	SRV7000-462/10	Y
14	Ash Pan Assembly		SRV7058-013	
	Heatilator Logo	Pkg of 10	4021-049/10	
15	Pedestal Side	Qty 2 req	SRV7059-153	
16	Blower, Convection		SRV7000-108	Y
17	Wire Harness		SRV7058-150	Y
18	Blower Retainer		SRV7058-148	
19	Control Board 3 Speed Eco-Choice		SRV7058-188	Y
20	Latch Backing Plate		SRV7058-155	
21	Blower, Exhaust Combustion		SRV7000-602	Y
22	Gasket, Exhaust Combustion Blower		SRV240-0812	Y
	Gasket, Combustion Blower, Round		812-4710	Y
23	Casting, Exhaust Transition		180-0190	

Snap Disc



24	Snap discs			
24.1	Snap Disc, 110-20 ( #1 )	Right	SRV230-1220	Y
24.2	Snap Disc Manual Reset ( #2 )	Left	SRV230-1960	Y
25	Feed Assembly		SRV7058-007	Y
	Feed Bearing		SRV7000-598	Y
	Feed Motor		812-4421	Y
	Feed Spring Assembly (Only)		SRV7001-046	Y
	Gasket, Feed Motor		SRV7034-144	
26	Snap Disc ( #3 )		SRV230-1290	Y
27	Side Curtain, Right		SRV7059-124	
28	Vacuum Switch		SRV7000-531	Y
29	Hopper Switch		SRV7000-612	Y
30	Bumper, Rubber	Pkg of 12	SRV224-0340/12	Y
	Fuse, 7 Amp, Junction Box	Pkg of 10	812-0380/10	Y

Additional service parts on following page.



Service Parts

PS50-C

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

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**Stocked at Depot**

Item	Description	Comments	Part Number	
	Component Pack		SRV7059-019	
	Cleanout Tool		414-1140	Y
	Harness, Thermostat Wire		230-0810	
	Power Cord		812-1180	Y
	Thermostat Mechanical		812-3760	Y
	Paint Touch Up		3-42-19905	
	Hose, Vacuum, 5/32 Id	3 Ft	SRV240-0450	Y
	Reset Button Assembly		SRV7000-040	
	Baffle Center Back		SRV7058-166	
	Collar, Offset, Top Vent		812-3570	
	Damper ,3"	For Tall Vertical Runs Only	PEL-DAMP3	Y
	Damper, 4"		PEL-DAMP4	
	Outside Air Kit, 2"		811-0872	
	Hose, Alum Flex, 2 Inch X 3 Ft	3 Ft	SRV200-0860	
	Outside Air Cap Assembly		7001-044	
	Outside Air Collar Assembly		SRV7001-045	
	Trim Plate, Outside Air Kit		412-7100	
	Pull Rod Handle		PULLROD-HNDL	
	Smart-Batt II		841-0970	
	Smart-Stat II		841-0960	
	Thermostat, Programmable		811-0520	
	Top Vent Adapter		TPVNT-5	
	Vent Adapter, 3-4"		811-0720	
	Vent Adapter, 90, Cleanout		TPVNT-6	

Additional service parts on following page.





Service Parts

PS50-C

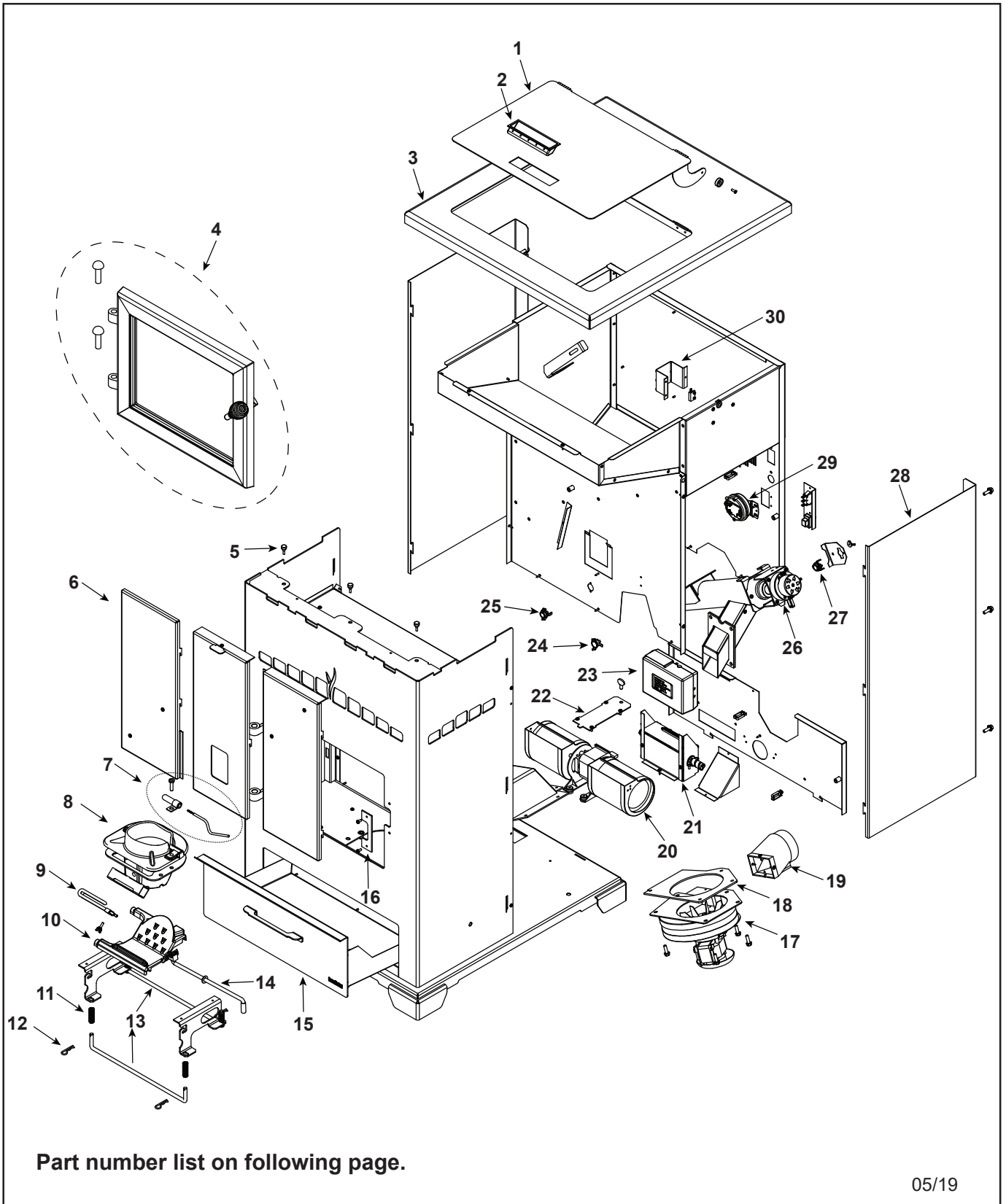
Beginning Manufacturing Date: Mar 2019  
 Ending Manufacturing Date: Active

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**Stocked at Depot**

Item	Description	Comments	Part Number	
<b>Fastener Packs</b>				
	Rivnut Repair Kit 1/4 -20 & 3/8-16 Rivnut Tools		RIVNUT-REPAIR	Y
	Bolt, Hex Head	Pkg of 10	25221A/10	Y
	Guide Pin Sleeve	Pkg of 25	31120/25	Y
	Hurricane Screw	Pkg of 40	SRV2005-861/40	
	Nut SER FL SMALL 1/4-20	Pkg of 24	226-0130/24	Y
	Nut, 2-WY SIDE-LOCK JAM 3	Pkg of 24	226-0100/24	Y
	Nut, Lock 1/4-20	Pkg of 25	226-0090/25	Y
	Screw 8 - 32x3/8 HWH BK	Pkg of 40	SRV060-883/40	
	Screw HWH MS 1/4-20 X3/4 NS	Pkg of 25	220-0080/25	Y
	Screw PH PHL TC 8-32X1/2	Pkg of 25	220-0030/25	Y
	Screw, Wing Thumb, 8-32X1/2	Pkg of 24	7000-223/24	Y
	SMS #8 X 1/2 S-GRIP BO	Pkg of 40	12460/40	Y
	Thumb Screw 1/4-20 x 3/4	Pkg of 10	844-5070	
	Washer, 1/4 SAE	Pkg of 24	28758/24	Y
	Washer, SAE	Pkg of 25	227-0080/25	Y





Service Parts

CAB50-C

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

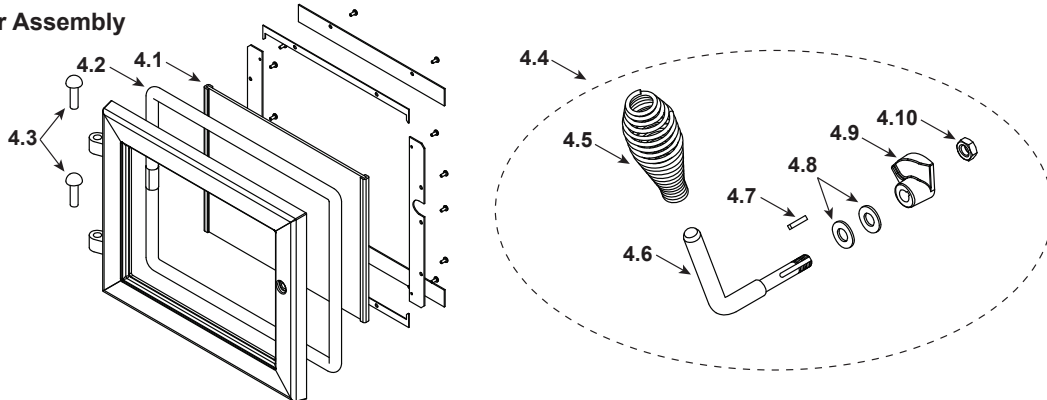
IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



Stocked at Depot

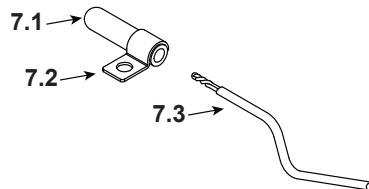
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Hopper Lid Assembly		SRV7074-009	Y
2	Handle, Hopper Lid		SRV200-0110	
3	Top Assembly		SRV7074-032	

#4 Door Assembly



4	Door Assembly		SRV7058-014	
4.1	Glass Assembly		SRV7058-015	Y
4.2	Rope, Door, 3/4" X 84"		832-1680	Y
	Corner Tape	1 Ft	SRV560-437-9	
	Gasket, Glass Tape, 3/4" X 1/8"	5 Ft	832-0460	Y
4.3	Hinge Pin, 1/2"	Nickel	SRV430-5320	
4.4	Door Handle Assembly		SRV7058-030	Y
4.5	Spring Handle, 1/2"	Black	250-8330	Y
4.6	Handle, Formed Door		SRV7058-182	
4.7	Key Latch, Cam		SRV430-1151	
4.8	Washer, SAE, 3/8 (Qty 2 req)	Pkg of 3	832-0990	Y
4.9	Cam Latch		SRV430-1141	
4.10	Nut, 2-Way Side-Lock Jam	Pkg of 24	226-0100/24	Y
5	Bumper, Rubber	Pkg of 12	SRV224-0340/12	Y
6	Baffle Assembly		SRV7059-026	Y

#7 Thermocouple Assembly



7.1	Thermocouple Protection Tube		SRV7034-186	Y
		Pkg of 10	SRV7034-186/10	
7.2	Half Clip		7000-321	
7.3	Thermocouple		812-4470	Y

Additional Service Parts on following page.



Service Parts

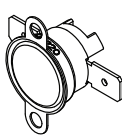


CAB50-C

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

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Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
8	Firepot Assembly		SRV7034-072B	Y
	Gasket, Firepot		SRV7034-190	Y
9	Heating Element Assembly 18" (Loop Igniter)	Pkg of 1	SRV7000-462	Y
		Pkg of 10	SRV7000-462/10	Y
10	Firepot Bottom		SRV7034-153	Y
11	Spring	Pkg of 4	7000-513/4	Y
12	Hitch Pin Clip 3/32	Pkg of 10	7000-374/10	Y
13	Rail, Auto-Clean		SRV7034-152	Y
14	Pull Rod		SRV7074-141	Y
15	Ash Pan Assembly		SRV7058-013	
	Heatilator Logo	Pkg of 10	4021-049/10	
16	Latch Backing Plate		SRV7058-155	
17	Exhasut Combustion Blower, 70 CFM		SRV7000-602	Y
18	Gasket, Exhaust Combustion Blower		SRV240-0812	Y
	Gasket, Combustion Blower, Round		812-4710	Y
19	Casting, Exhaust Transition		180-0190	
20	Convection Blower, 220 CFM		SRV7000-108	Y
21	Wire Harness		SRV7058-150	Y
22	Blower Retainer		SRV7058-148	
23	Control Board 3 Speed Eco-Choice		SRV7058-188	Y
<p><b>Snap discs</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>24</p>  <p>F110F-20</p> </div> <div style="text-align: center;"> <p>25</p>  <p>L175F Manual Reset</p> </div> <div style="text-align: center;"> <p>27</p>  <p>L250F Manual Reset</p> </div> </div>				
24	Snap Disc F110F-20 ( #1 )		SRV230-1220	Y
25	Snap Disc L175F Manual Reset ( #2 )		SRV230-1960	Y
26	Feed Assembly		SRV7058-007	Y
	Feed Bearing		SRV7000-598	Y
	Feed Motor		812-4421	Y
	Feed Spring Assembly (Only)		SRV7001-046	Y
	Gasket, Feed Motor		SRV7034-144	
27	Snap Disc L250F Manual Reset ( #3 )		SRV230-1290	Y
28	Side Curtain	Qty 2 req	SRV7074-124	
29	Vacuum Switch		SRV7000-531	Y

Additional Service Parts on following page.



Service Parts

CAB50-C

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

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Stocked  
at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
30	Hopper Lid Magnetic Switch		SRV7000-375	Y
	Jumper Hopper Switch		SRV7074-175	Y
	Component Pack		SRV7074-019	
	Cleanout Tool		414-1140	Y
	Harness, Thermostat Wire		230-0810	
	Power Cord		812-1180	Y
	Thermostat Mechanical		812-3760	Y
	Touch Up Paint		3-42-19905	
	Fuse, 7 Amp, Junction Box	Pkg of 10	812-0380/10	Y
	Hose, Vacuum, 5/32 Id	3 Ft	SRV240-0450	Y
	Damper, 4 Inch		PEL-DAMP4	
	Outside Air Kit, 2"		811-0872	
	Hose, Alum Flex, 2 Inch X 3 Ft	3 Ft	SRV200-0860	
	Outside Air Cap Assembly		7001-044	
	Outside Air Collar Assembly		SRV7001-045	
	Trim Plate, Outside Air Kit		412-7100	
	Pull Rod Handle		PULLROD-HNDL	
	Reset Button Assembly		SRV7000-040	
	Smart-Batt II		841-0970	
	Smart-Stat II		841-0960	
	Thermostat, Programmable		811-0520	
	Top Vent Adapter		TPVNT-5	
	Component Pack, TPNVT		SRV7058-054	
	Vent Adapter, 3-4"		811-0720	
	Vent Adapter, 90, Cleanout		TPVNT-6	
	Baffle Center Back		SRV7058-166	

Additional Service Parts on following page.



Service Parts

**CAB50-C**

Beginning Manufacturing Date: Mar 2019  
Ending Manufacturing Date: Active

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Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
<b>Fastener Packs</b>				
	Rivnut Repair Kit		RIVNUT-REPAIR	Y
	Bolt, Hex Head, 1/4-20 X 1	Pkg of 10	25221A/10	Y
	Guide Pin Sleeve	Pkg of 25	31120/25	Y
	Hurricane Screw	Pkg of 40	SRV2005-861/40	
	Nut, 2-Wy Side-Lock Jam 3	Pkg of 24	226-0100/24	Y
	Nut, Lock 1/4-20	Pkg of 25	226-0090/25	Y
	Nut, Ser Flange Small 1/4-20	Pkg of 24	226-0130/24	Y
	Screw 8 - 32x3/8 HWH BK	Pkg of 40	SRV060-883/40	
	Screw Hwh Ms 1/4-20 X 3/4 Ns	Pkg of 25	220-0080/25	Y
	Screw, Sheet Metal #8 X 1/2 S-Grip	Pkg of 40	12460/40	Y
	Thumbscrew, 1/4-20 X 3/4	Pkg of 10	844-5070	
	Washer, 1/4 Sae	Pkg of 24	28758/24	Y
	Washer, Sae	Pkg of 25	227-0080/25	Y
	Wing Thumb Screw 8-32X1/2	Pkg of 24	7000-223/24	Y

# 13 Tech Check Sheet

Please answer all of the questions below if you need to contact the technical service department. This will help all of us to identify the problem faster and will save you time.

What is wrong with the appliance? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_

How is it installed? Vertical \_\_\_ or Horizontal \_\_\_ or Other \_\_\_\_\_

How many feet of vent? Vertical: \_\_\_\_\_ Horizontal: \_\_\_\_\_

How many elbows are in the vent system? \_\_\_\_\_

What size is the exhaust pipe? 3 in: \_\_\_\_\_ 4 in: \_\_\_\_\_ 6 in: \_\_\_\_\_ Other: \_\_\_\_\_

What is the elevation of the home? \_\_\_\_\_

What is the feed adjustment plate set at? \_\_\_\_\_

Is the feed system operating? \_\_\_\_\_

Is there power to the stove? \_\_\_\_\_

Is there fuel in the hopper? \_\_\_\_\_

Will the thermostat call light come on? \_\_\_\_\_

Is the igniter working? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the exhaust blower working? Yes \_\_\_\_\_ No \_\_\_\_\_

Are you reaching the first stage of ignition (green light)? Yes \_\_\_\_\_ No \_\_\_\_\_

Are you reaching the second stage of ignition (red light)? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the convection blower working? Yes \_\_\_\_\_ No \_\_\_\_\_

Is there an outside are kit installed? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the thermostat anticipator set at the lowest setting? Yes \_\_\_\_\_ No \_\_\_\_\_


Are the heat exchangers free of ash and clean? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the vent system clean? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the hopper free of sawdust build up? Yes \_\_\_\_\_ No \_\_\_\_\_


Is the fire pot clean? Yes \_\_\_\_\_ No \_\_\_\_\_

# 14 Cleaning & Maintenance Tips

 **CAUTION**

**Shock and Smoke Hazard**

- Turn down thermostat, let appliance completely cool and exhaust blower must be off. Now you can unplug appliance before servicing.
- Smoke spillage into room can occur if appliance is not cool before unplugging.
- Risk of shock if appliance not unplugged before servicing appliance.



Cleaning or Inspection	Frequency		Daily	Weekly	Every 2 Weeks	Monthly	Yearly
Ash Pan - Burning Wood Pellets	Every 5 bags of fuel	OR		X			
Ash Pan - Burning Alternate Fuels	Every 1 bag of fuel	OR	X				
Ash Removal from Firebox	More frequently depending on the fuel type or ash build-up	OR		X			
Blower, Combustion (Exhaust)	More frequently depending on the fuel type	OR					X
Blower, Convection	More frequently depending on the operating environment	OR					X
Door Latch Inspection	Prior to heating season	OR				X	
Firebox - Prepare for Non-Burn Season	At end of heating season	OR					X
Fire pot - Burning Softwood Pellets	Every 5 bags	OR		X			
Fire pot - Burning Hardwood Pellets	Every 3 bags	OR		X			
Glass	When clear view of fire pot becomes obscured	OR		X			
Heat Exchanger & Drop Tube	Every 1 ton of fuel	OR			X		
Hopper	Every 1 ton of fuel or when changing fuel types	OR				X	
Top Vent Adapter	More frequently depending on ash build-up	OR					X
Venting System	More frequently depending on the fuel type	OR					X

**NOTICE:** These are recommendations. Clean more frequently if you encounter heavy build-up of ash at the recommended interval or you see soot coming from the vent. Not properly cleaning your appliance on a regular basis will void your warranty.



# 15

## Service Repair Tools

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1. **MULTIMETER**  
Used for taking volt reading or doing continuity tests.
2. **MAGNEHELIC OR DIGITAL VACUUM GAUGE**  
Used for taking firebox vacuum readings in inches of water column. Range of the gauge needs to be from zero to .50 inches of water column. A vacuum hose and a "T" will also be needed.
3. **HAND TOOLS**  
Phillips and flathead screwdriver, 11/32 inch nut driver, SAE Allen wrench set, and SAE socket set.
4. **TEST BOX**  
Needed for checking the wire harness and components
5. **VACUUM CLEANER**  
Needed to clean firebox, heat exchanger, blowers, and venting.
6. **MICRO CLEANING KIT FOR VACUUM CLEANER**  
This is an attachment kit for cleaning the "hard to reach" areas.







**CONTACT INFORMATION**

Hearth & Home Technologies  
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Halifax, PA 17032  
Division of HNI INDUSTRIES

**Please contact your Heatilator dealer with any questions or concerns.  
For the number of your nearest Heatilator dealer  
log onto [www.heatilatorecochoice.com](http://www.heatilatorecochoice.com)**

**CAUTION**



**DO NOT DISCARD THIS MANUAL**

Important operating and maintenance instructions included.

• Read, understand and follow these instructions for safe installation and operation.

• Leave this manual with party responsible for use and operation.



**We recommend that you record the following pertinent information for your heating appliance.**

Date purchased/installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Location on appliance: \_\_\_\_\_

Dealership purchased from: \_\_\_\_\_ Dealer phone: 1(\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.

