

ADVANTAGE II - T  
ADVANTAGE III  
PELLET STOVES

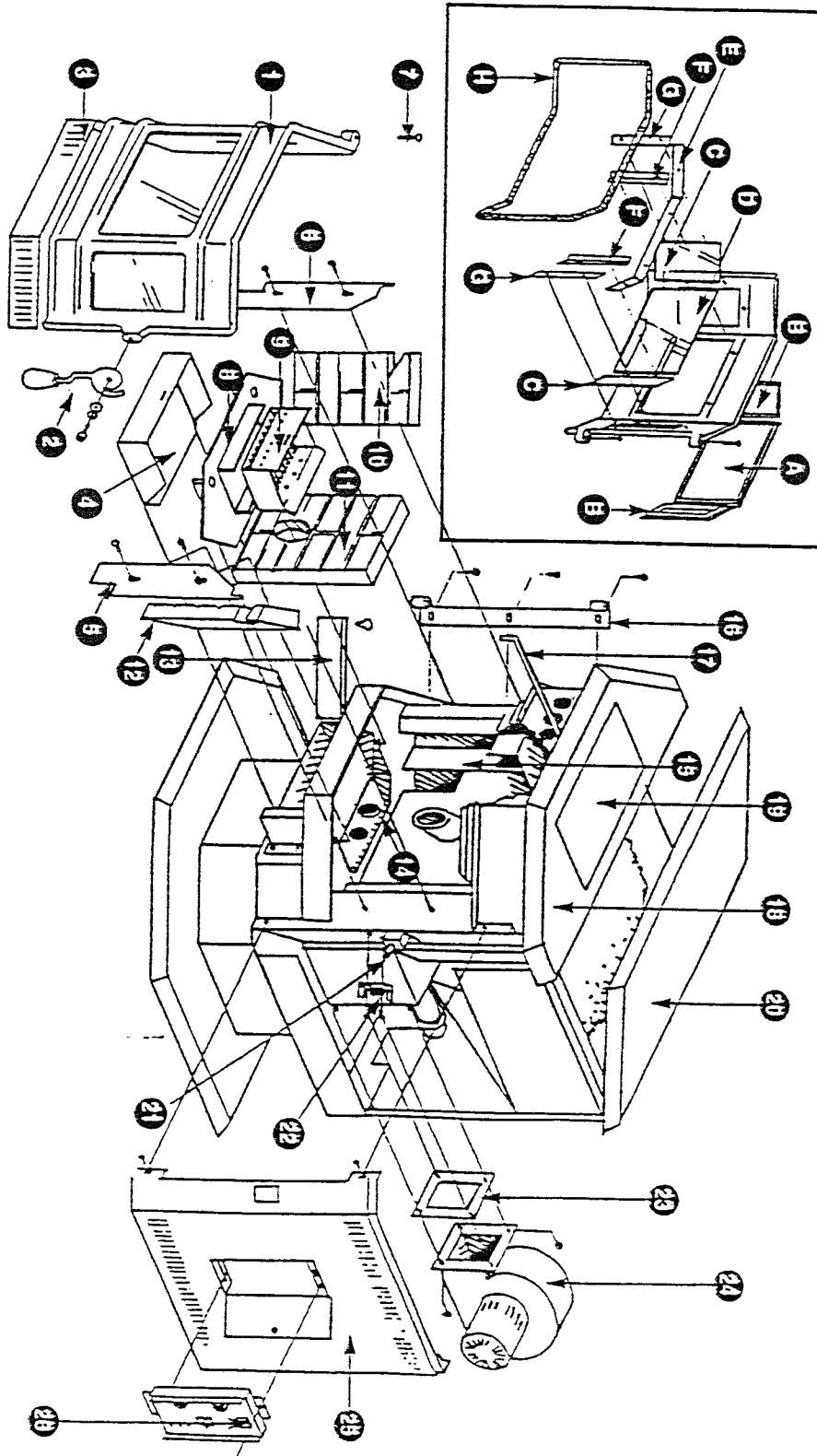
# WHITEFIELD TECHNICAL TRAINING MANUAL

## ADVANTAGE PELLET STOVE CUT-A-WAY- DIAGRAM PARTS LIST

- | <u>Description</u>  |   |
|---|---|
| 1. Advantage II-T Door Complete - Black<br>Advantage II-T Door Complete - Brown<br>Advantage II-T Door Complete - Slate<br>A. Center Window Trim<br>B. Side Window Trim (pkg. of 2)<br>C. Side Window Glass<br>D. Center Window Glass<br>E. Window Wash Bracket<br>F. Window Clip (bent)<br>G. Window CLip (flat)<br>H. Door Gasket - 8' x 1/2" | 18. Top Front Panel - Black<br>Top Front Panel - Brown<br>Top Front Panel - Slate                   |
| Advantage III Door Complete - Black<br>Advantage III Door Complete - Brown<br>Advantage III Door Complete - Slate<br>Glass<br>Window Wash Bracket<br>Door Gasket 8' x 1/2"<br>Bottom Window Clip<br>Side Window Clip  | 19. Trivet - Black<br>Trivet - Brown<br>Trivet - Slate<br>Trivet - Gold                             |
| 2. Door Handle Assembly - Black<br>Door Handle Assembly - Brown<br>Door Handle Assembly - Slate<br>Door Latch Bolt<br>Wood Door Handle<br>Shoulder Bolt<br>Wave Washer<br>Flat Washer   | 20. Hopper Lid with Hinge - Black<br>Hopper Lid with Hinge - Brown<br>Hopper Lid with Hinge - Slate |
| 3. Ash Pan Trim - Black<br>Ash Pan Trim - Brown<br>Ash Pan Trim - Slate   | 21. Shoulder Bolt with Roller   |
| 4. Ash Pan  | 22. High Limit Snap Switch (pkg. of 3)  |
| 5. Brick Retainer (Right)   | 23. Convection Fan Mounting Gskt.   |
| 6. Brick Retainer (Left)  | 24. Convection Fan  |
| 7. Hinge Pin  | 25. Right Side Panel - Black<br>Right Side Panel - Brown<br>Right Side Panel - Slate                |
| 8. Ultra Grate Base Plate Kit   | 26. Control Board   |
| 9. Ultra Grate  | 27. Damper Handle   |
| 10, 11, 12. Firebrick Set   | 28. Damper Rod Collar   |
| 13. Ash Pan Door Assembly   | 29. Damper Rod  |
| 14. Self Igniter Receptical Plug  | 30. Left Side Panel - Black<br>Left Side Panel - Brown<br>Left Side Panel - Slate                   |
| 15. Ash Trap Baffle Kit   | 31. Combustion Fan Motor Only   |
| 16. Door Hinge Bracket  | 32. Combustion Fan Assembly   |
| 17. Heat Exchange Tube Scraper Rod  | 33. Combustion Fan Mounting Gskt.   |
|   | 34. Low Limit Snap Switch   |
|   | 35. Damper Plate  |
|   | 36. Pressure Switch   |
|   | 37. Pressure Switch Hose  |
|   | 38. Air Inlet High-Limit Snap Switch  |
|   | 39. Auger   |
|   | 40. Auger Retention Plate Gasket  |
|   | 41. Auger Retention Plate   |
|   | 42. Set Collar & Screw  |
|   | 43. Auger Motor   |
|   | 44. Power Cord  |
|   | 45. Rear Inspection Panel - Black<br>Rear Inspection Panel - Brown<br>Rear Inspection Panel - Slate |

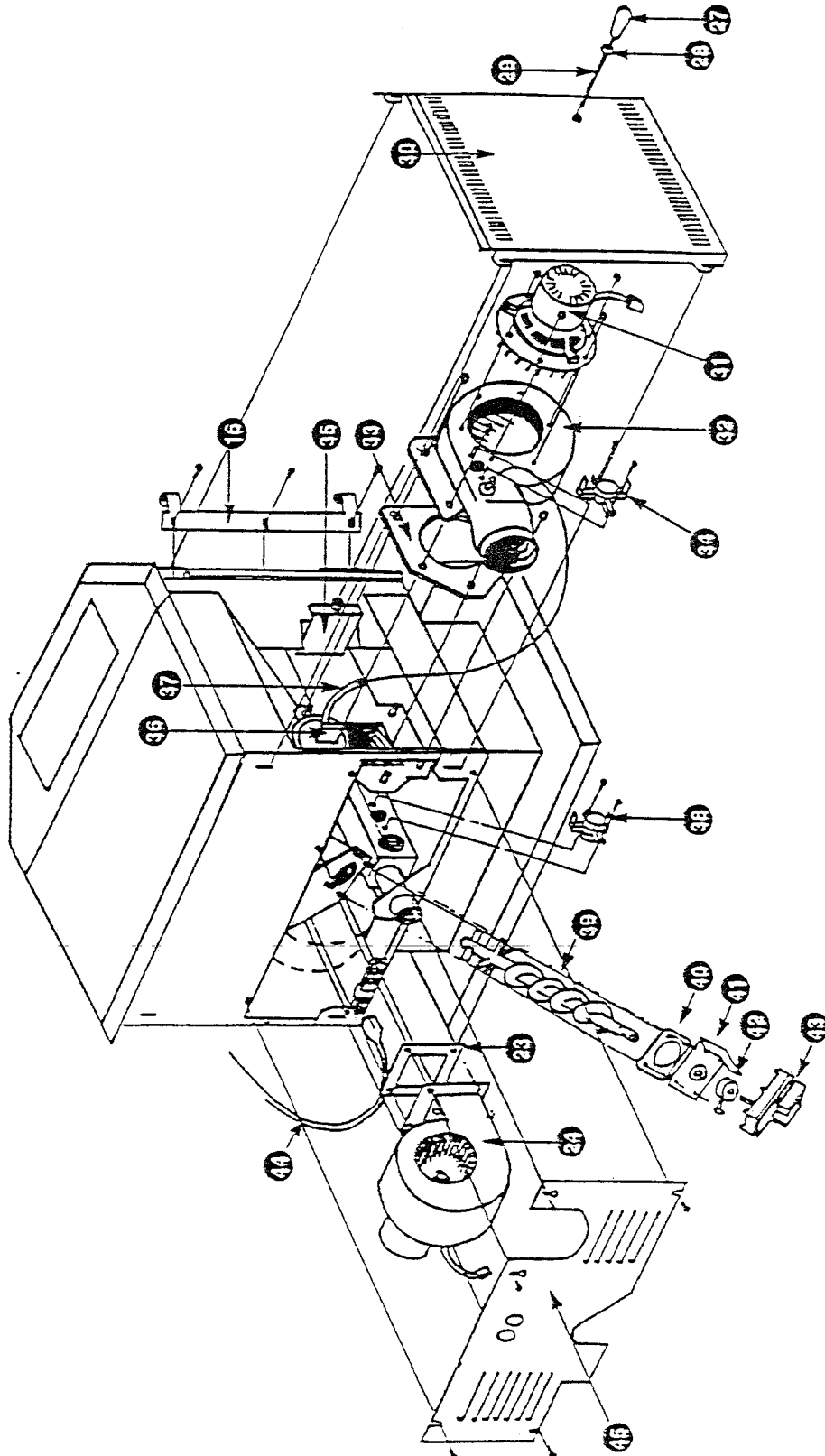
# WHITFIELD ADVANTAGE SERVICE MANUAL

## ADVANTAGE EXPLODED VIEW

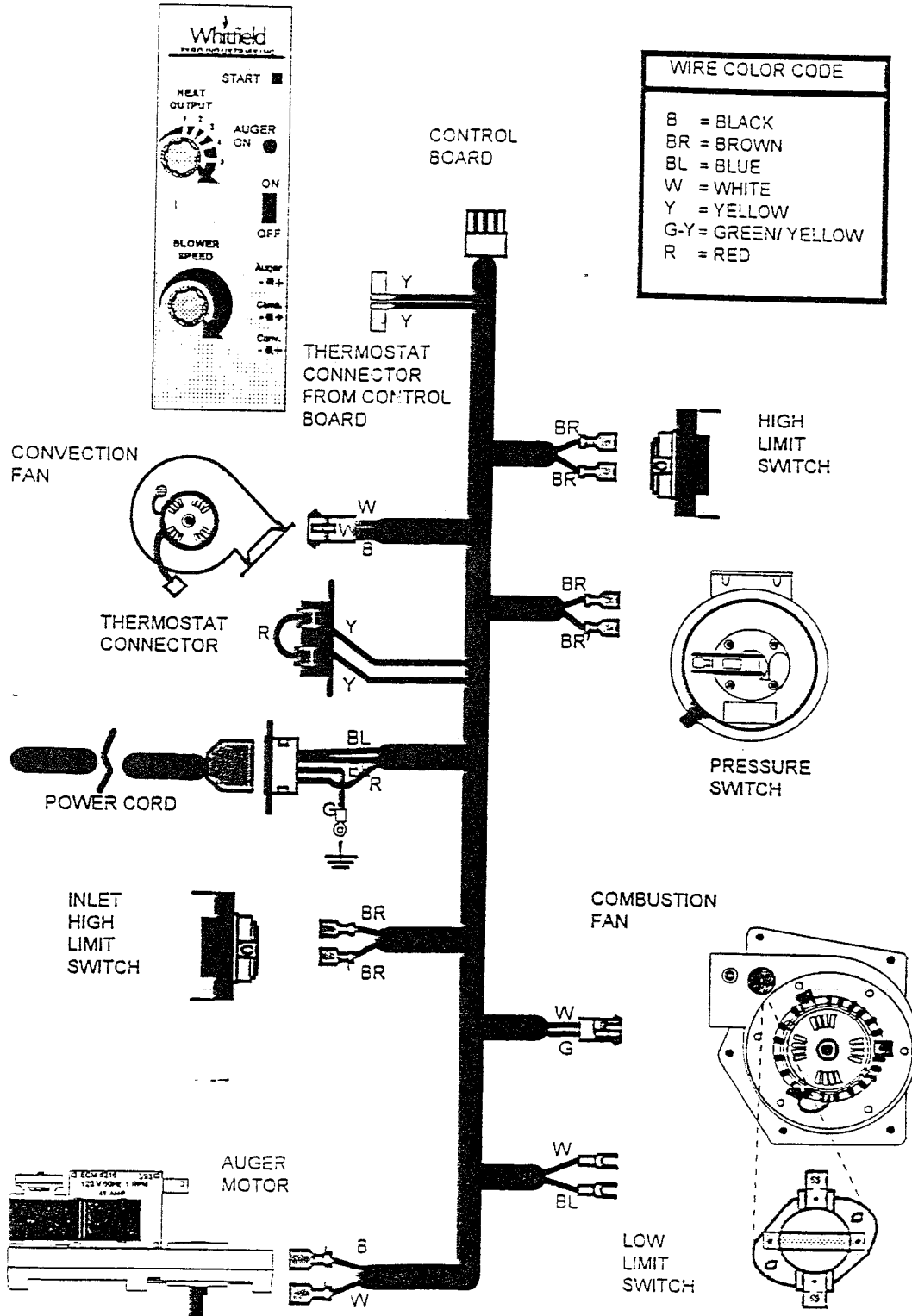


# WHITEFIELD TECHNICAL TRAINING MANUAL

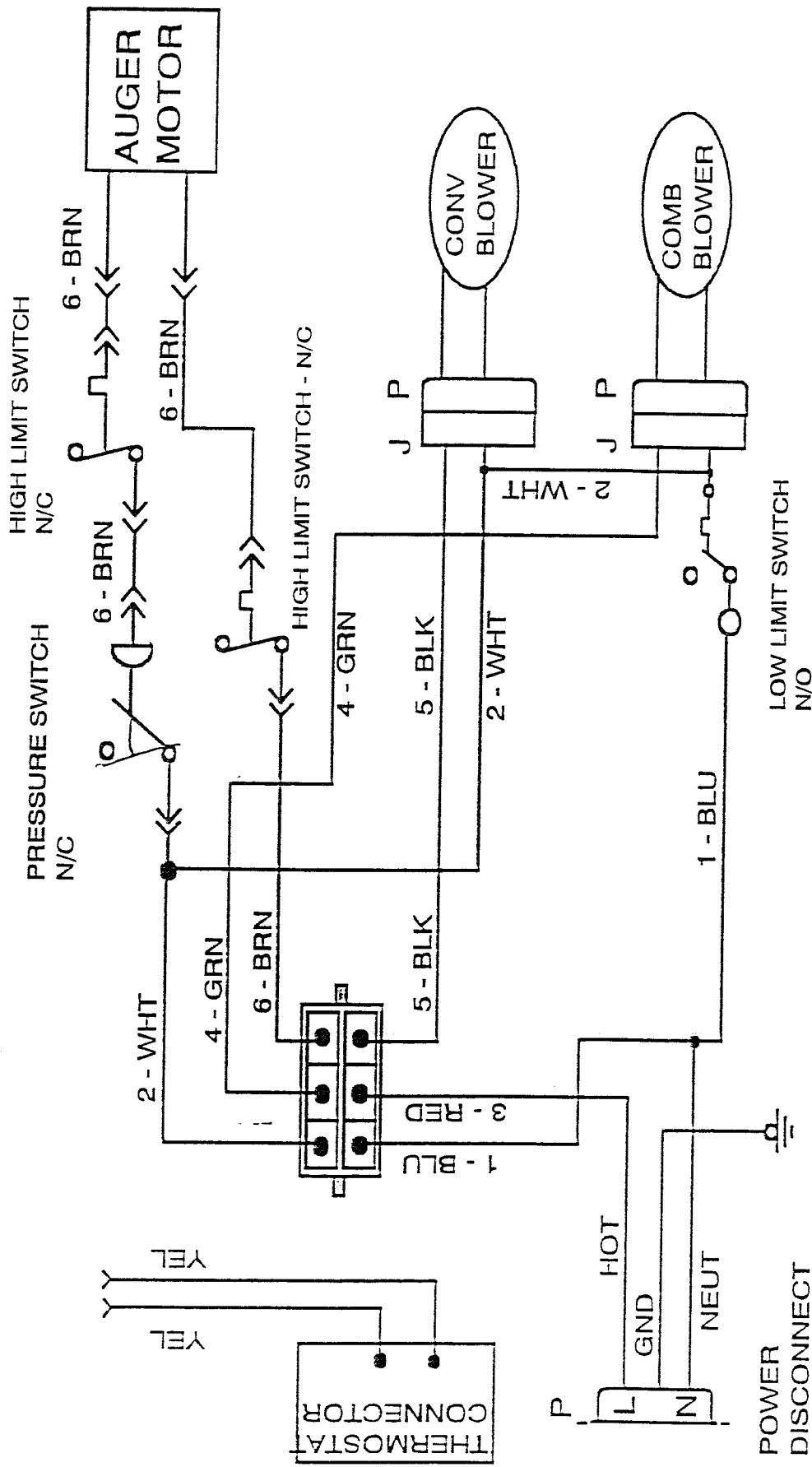
## ADVANTAGE EXPLODED VIEW



# 1994 Advantage Wiring Harness



WIRING HARNESS / COMPONENT HOOKUP DIAGRAM  
(Serial # 75,864 and greater)

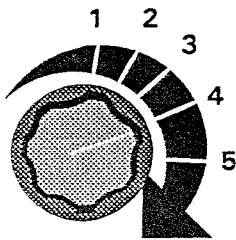


WIRING HARNESS CONFIGURATION (Serial # 75,864 and higher)

**Whitfield**  
PYRO INDUSTRIES INC.

START

HEAT  
OUTPUT

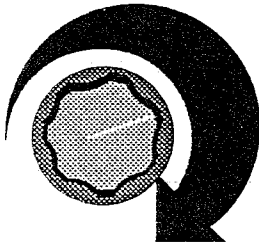


AUGER  
ON

ON

OFF

BLOWER  
SPEED



Auger

-  +

Comb.

-  +

Conv.

-  +

**Board Specifications**

Auger "ON" Time: 1.4 seconds

Auger "OFF" Time:

1. 7.0

2. 5.0

3. 3.0

4. 2.0

5. 1.5

Combustion Voltage:

1. 70

2. 73

3. 80

4. 87

5. 107

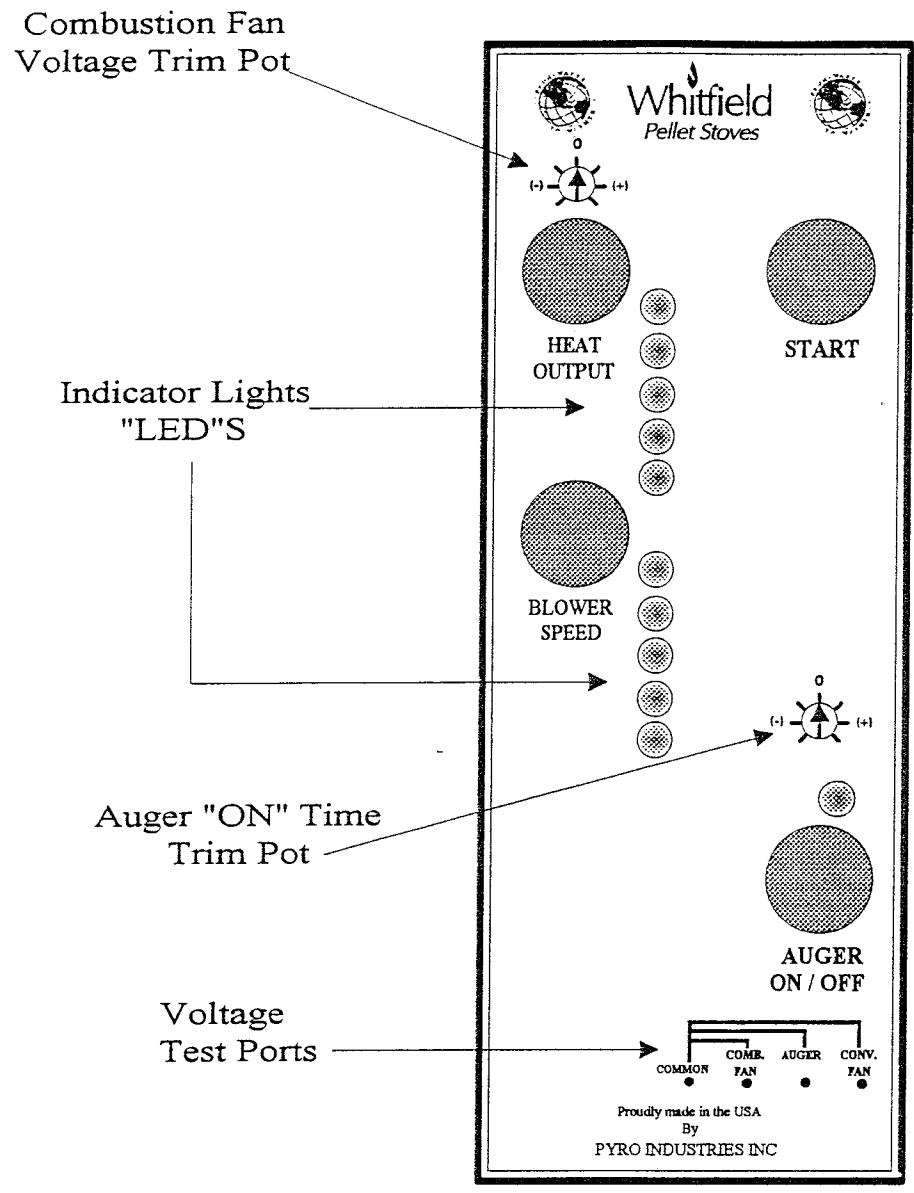
Convection Voltage:

Minimum: 70 Volts

Maximum: 113 to 120

# Advantage II-T & Advantage III Control Board

Starting Serial Number: 91410



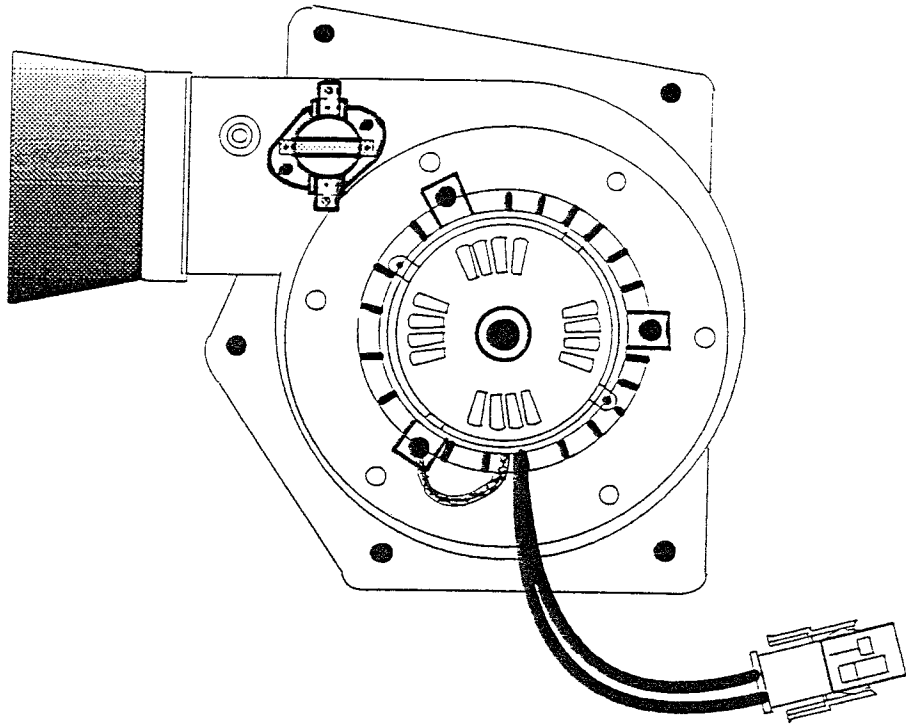
**Board Specifications:**

Auger "ON" Time: 1.4 seconds  
 Auger "OFF" Time:  
 1. 7.0  
 2. 5.0  
 3. 3.0  
 4. 2.0  
 5. 1.5

Combustion Voltage:  
 1. 70  
 2. 73  
 3. 80  
 4. 87  
 5. 107

Convection Voltage:  
 1. 60  
 2. 65  
 3. 70  
 4. 75  
 5. 85



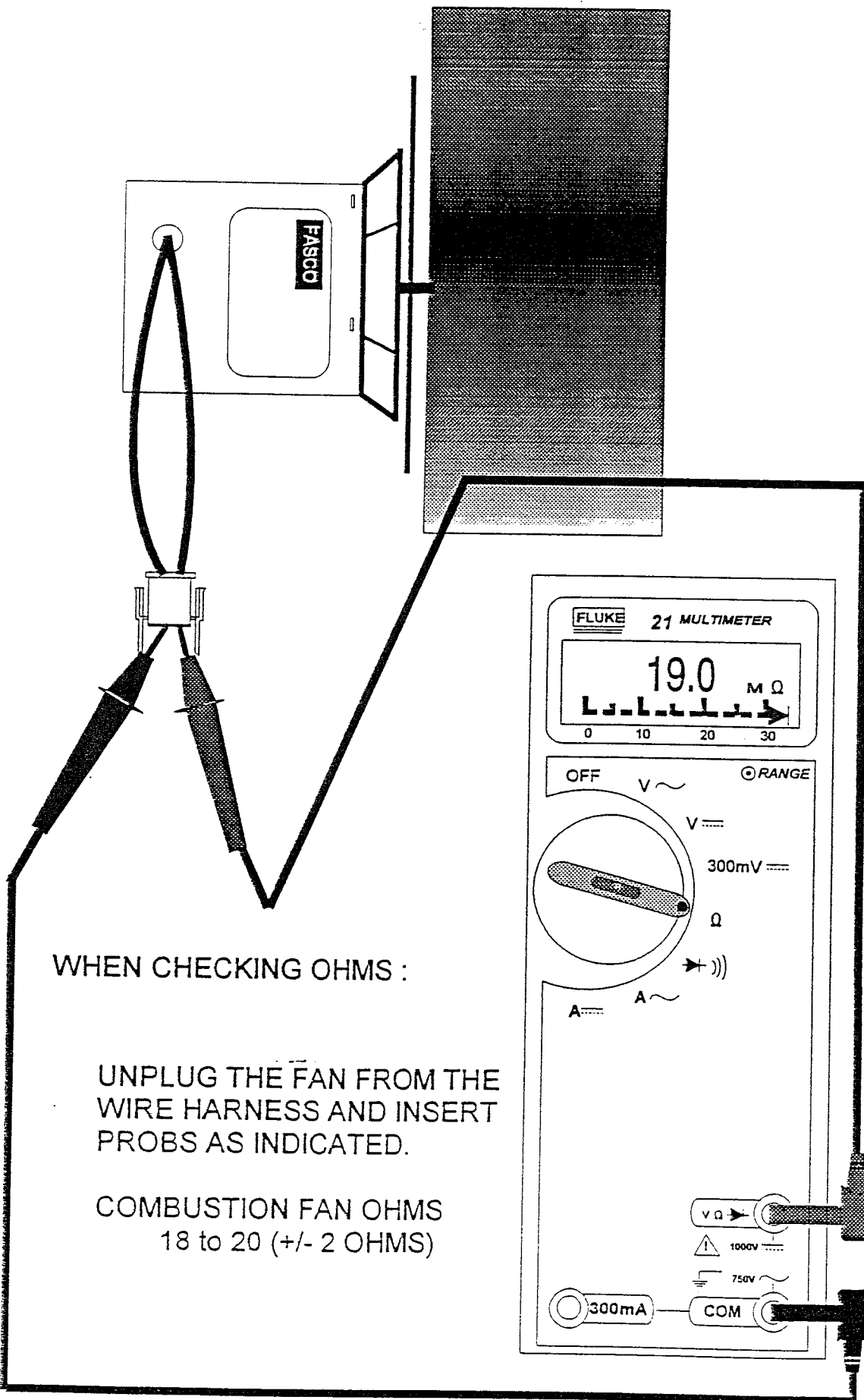


**COMBUSTION FAN : PN # 12156009**  
(COMPLETE ASSEMBLY)

FASCO PN # 7021- 8786      TYPE U21B      HP 1/70

115 V      60 HZ      .95 AMP      CLASS "B"

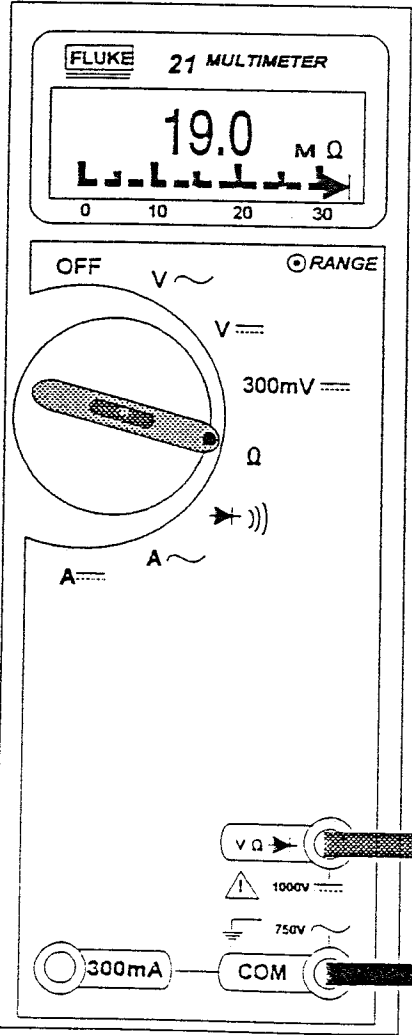
3000 RPM      THERMALLY PROTECTED



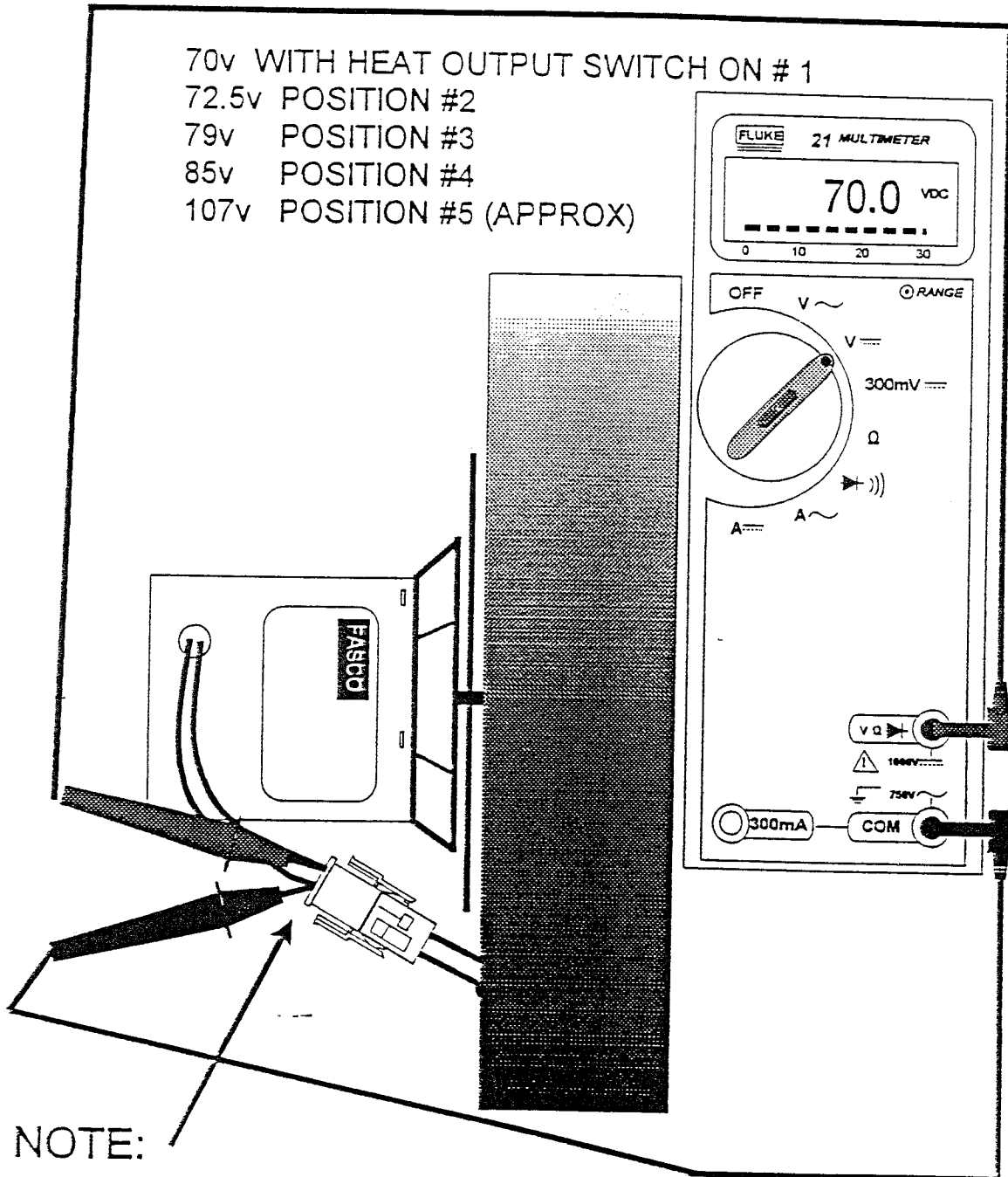
WHEN CHECKING OHMS :

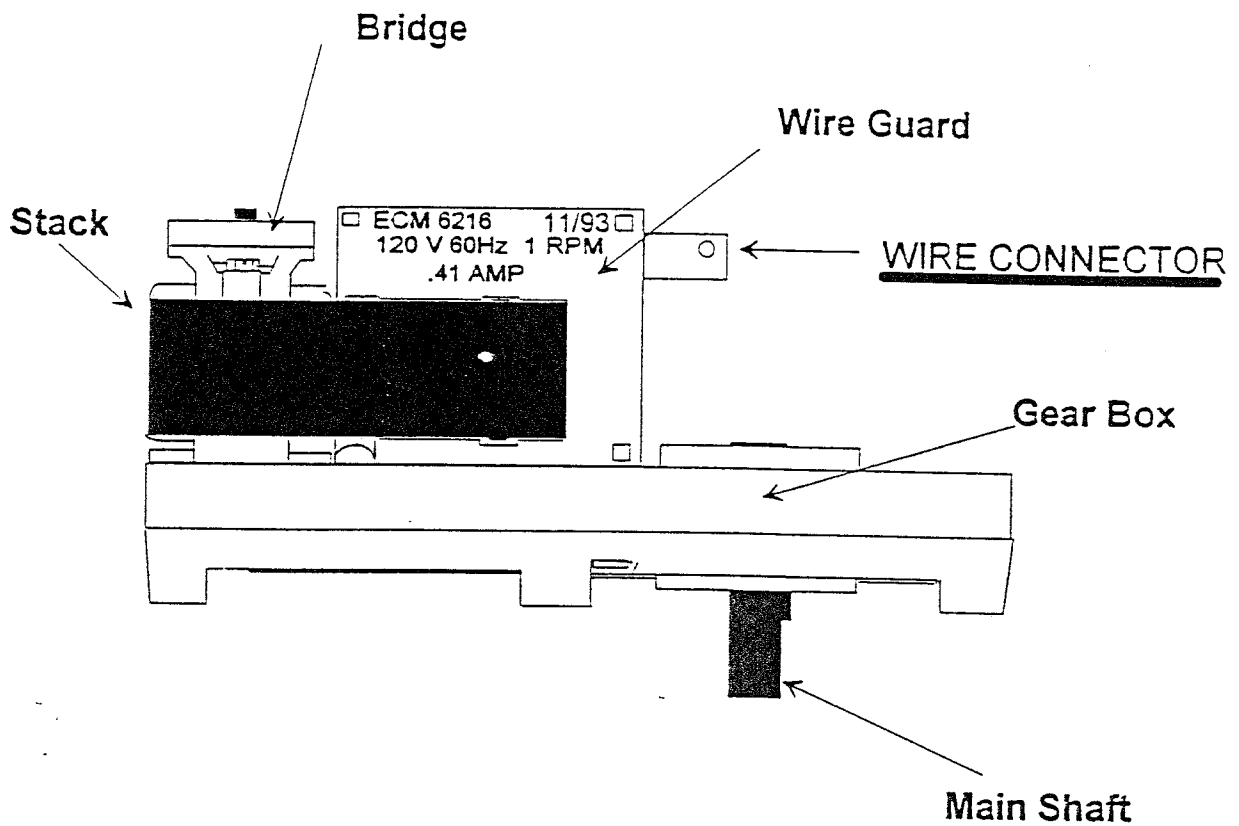
UNPLUG THE FAN FROM THE WIRE HARNESS AND INSERT PROBS AS INDICATED.

COMBUSTION FAN OHMS  
18 to 20 (+/- 2 OHMS)



# VOLTAGE READING TAKEN AS SHOWN -94'





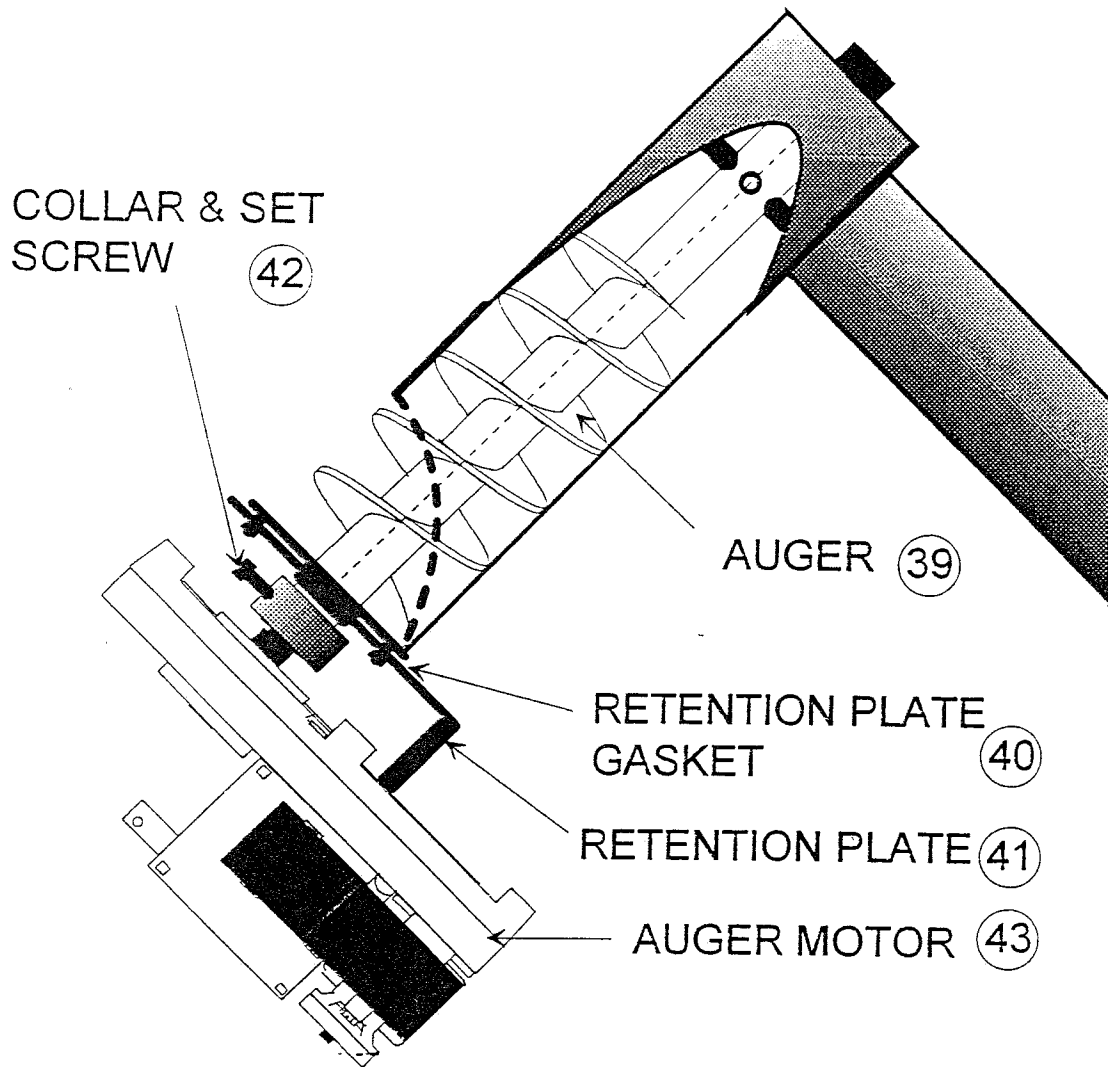
**Auger Motor - PN # 12026300**

ECM # 6216 (#5979 has wire leads)

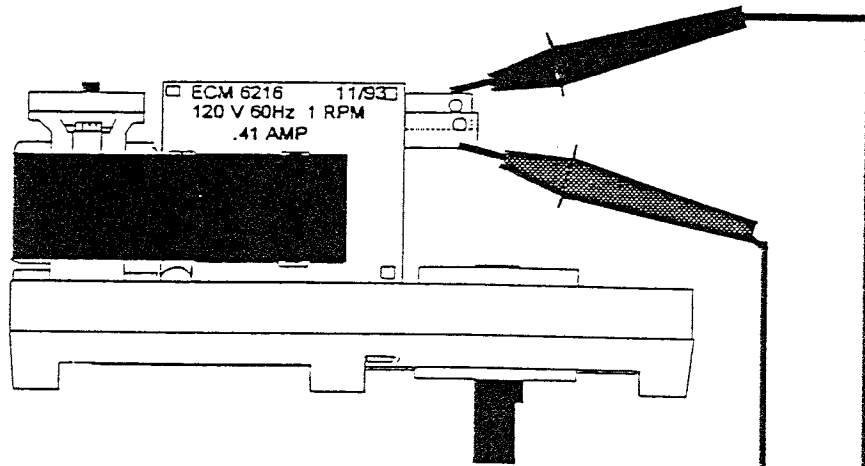
.41 amps      60 Hz      120V      1 rpm

18 ohm impedance (+ / - 2 ohms)

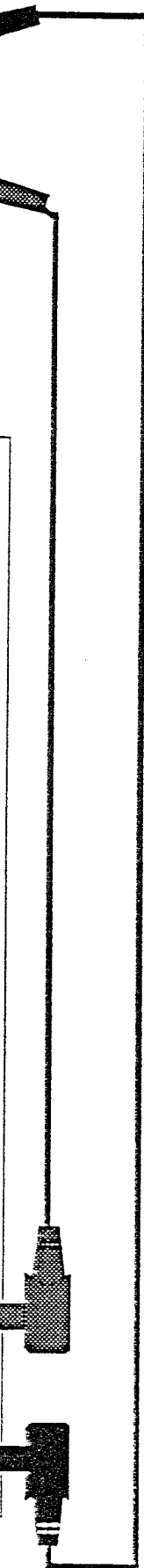
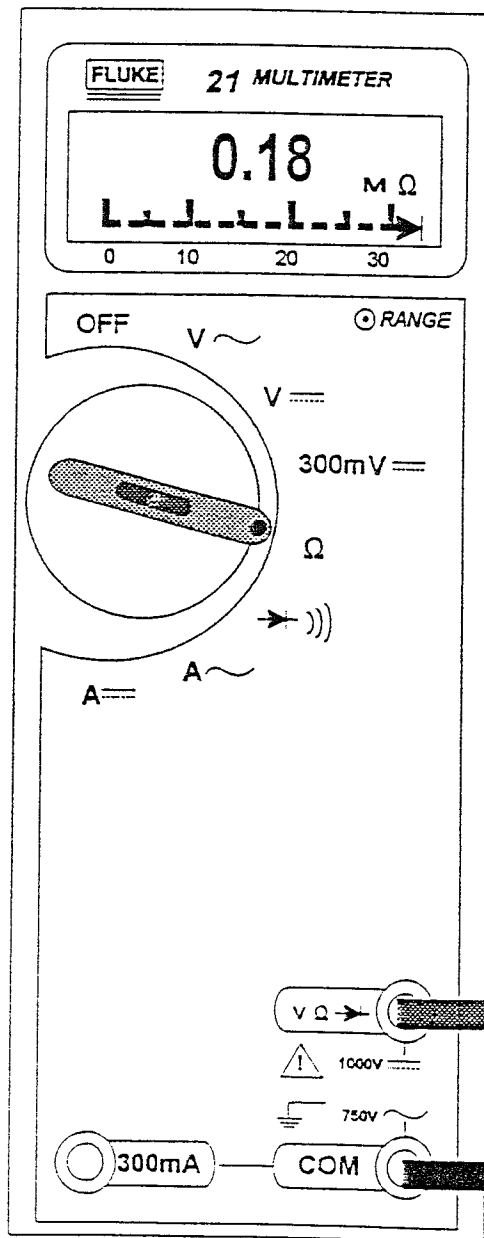
# ADVANTAGE AUGER SYSTEM CUT-A-WAY VIEW

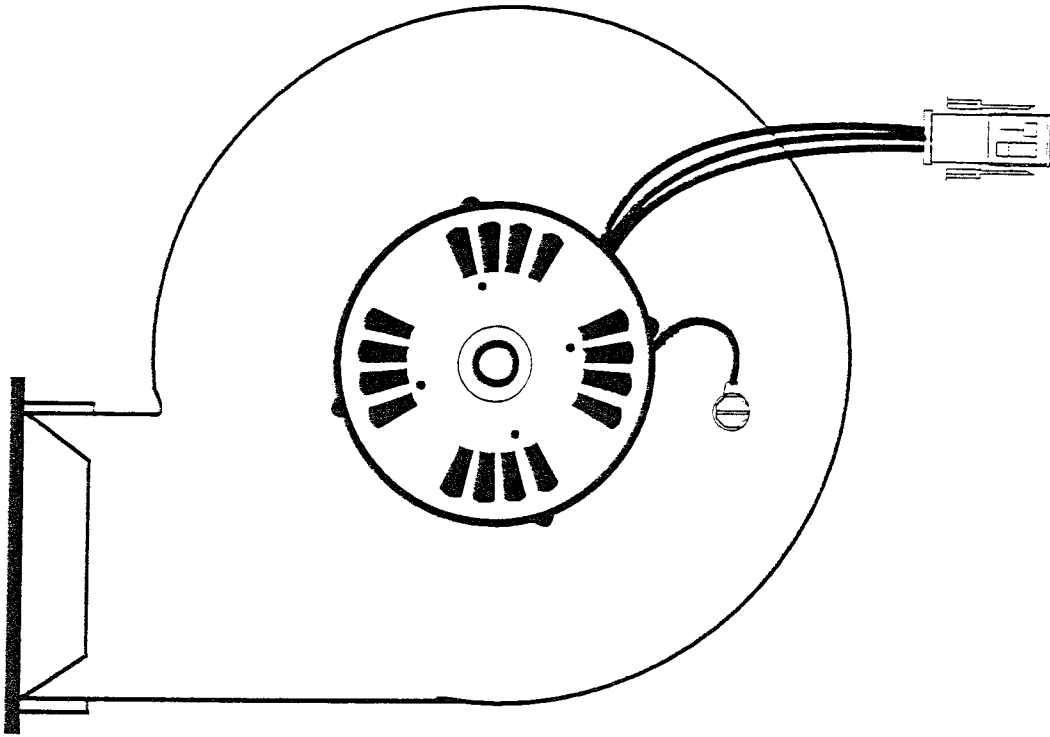


(39)	AUGER	13052100
(40)	AUGER RETENTION PLATE GASKET	61050003
(41)	AUGER RETENTION PLATE	12153900
(42)	AUGER COLLAR & SET SCREW	12041300
(43)	AUGER MOTOR	12046300



ohms read out  
will show as  
indicated (+/-2)





# Convection Fan

PN # 12146109

FASCO # 7021-8786

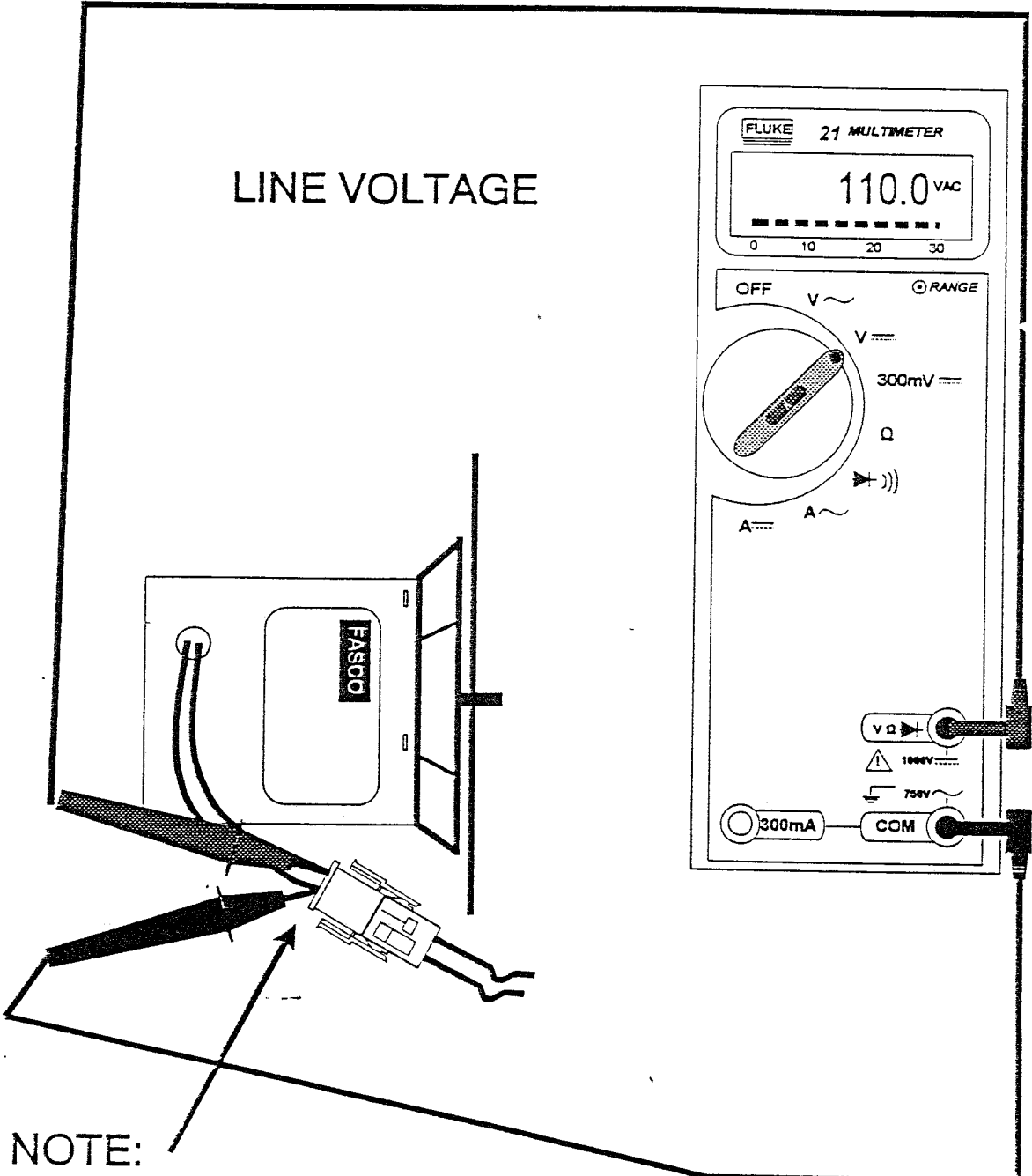
Thermally Protected

1500 to 3000 RPM nominal

80cfm free air

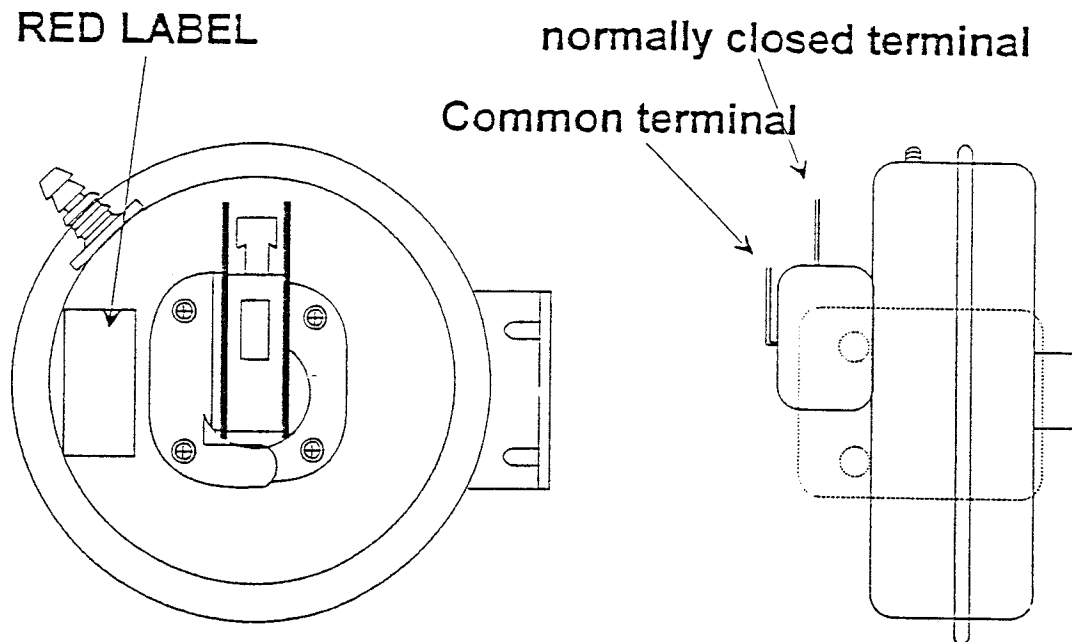
1.25 amps    60 Hz    115 V

# VOLTAGE READING TAKEN AS SHOWN



**NOTE:**  
INSERT METER PROBS FROM THE MOTOR SIDE OF THE PLUG!  
(YOU DO NOT NEED TO UNPLUG FROM THE WIRE HARNESS)





## POSITIVE PRESSURE SWITCH - PN# 12125903

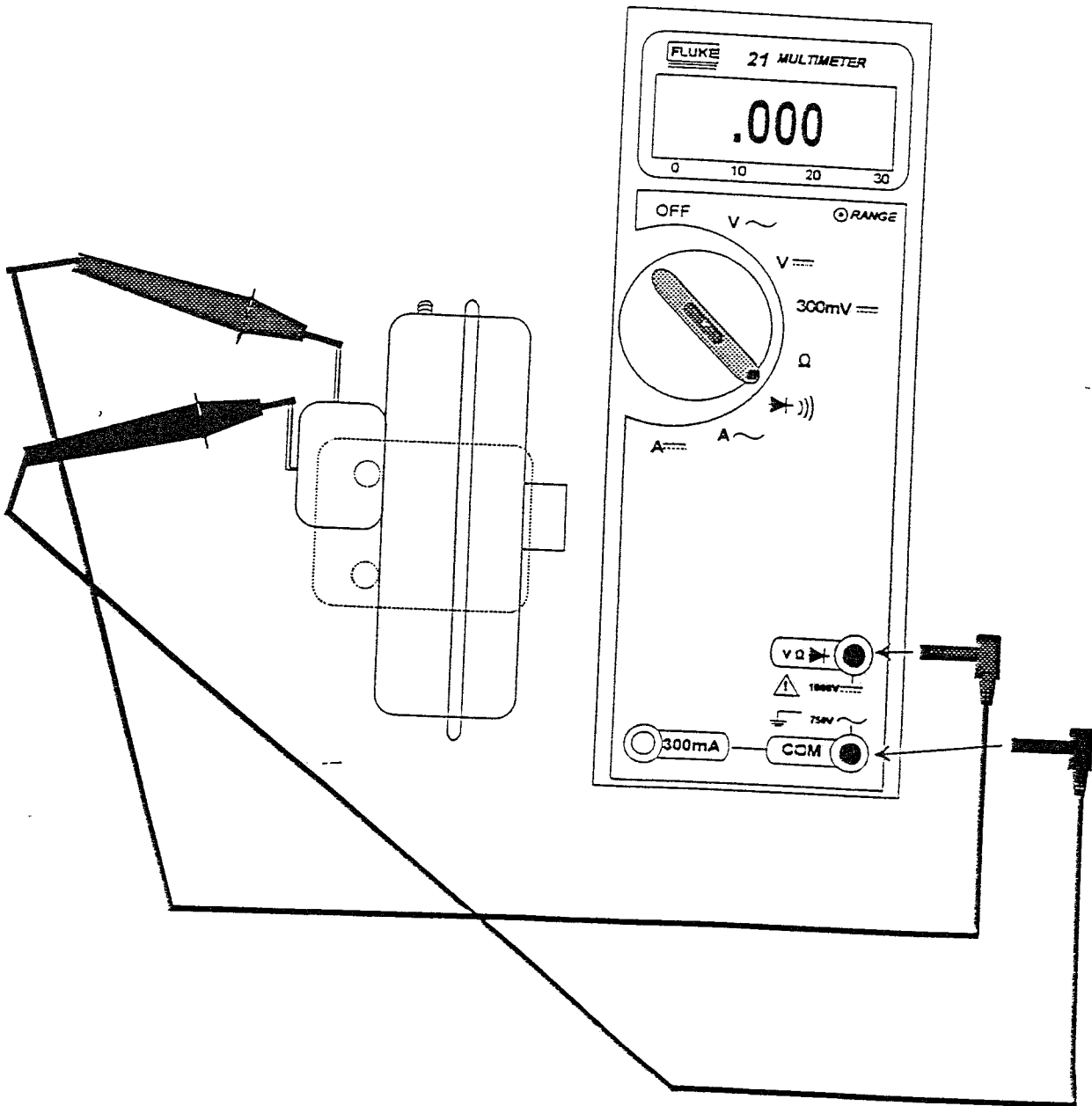
**RED LABEL**

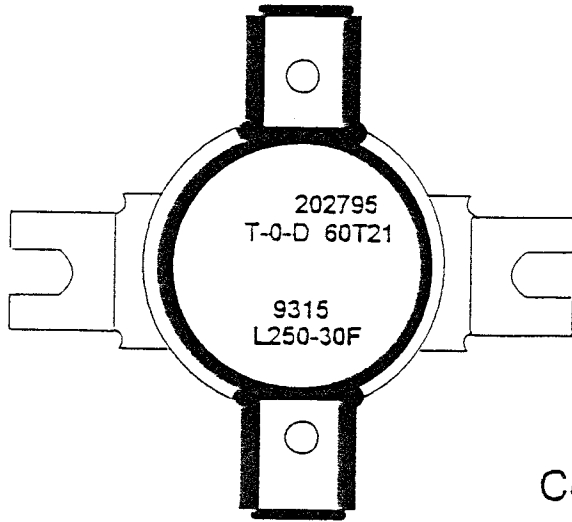
**SN# 18145 and up**

**ELECTRICAL SWITCH:** Single pole, normally closed, snap acting contacts. Contacts change on pressure rise @ .11" +/- .04" W.C.

**OPERATING TEMPERATURE RANGE :**  
- 40 TO 190 degree F

Normally closed switch will read as indicated





## HIGH LIMIT SNAP SWITCH

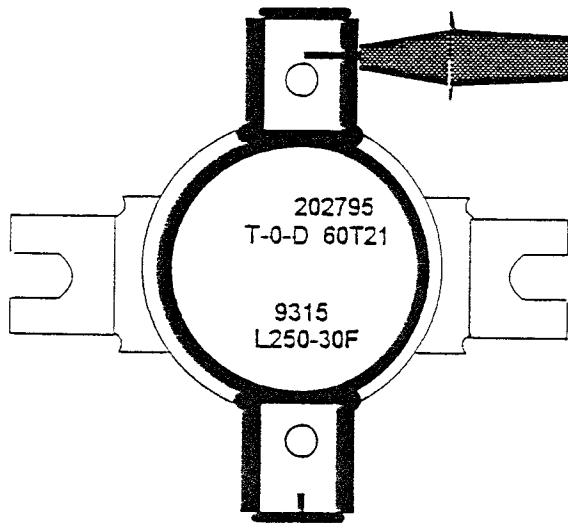
PN # 12127705

TWO PER STOVE

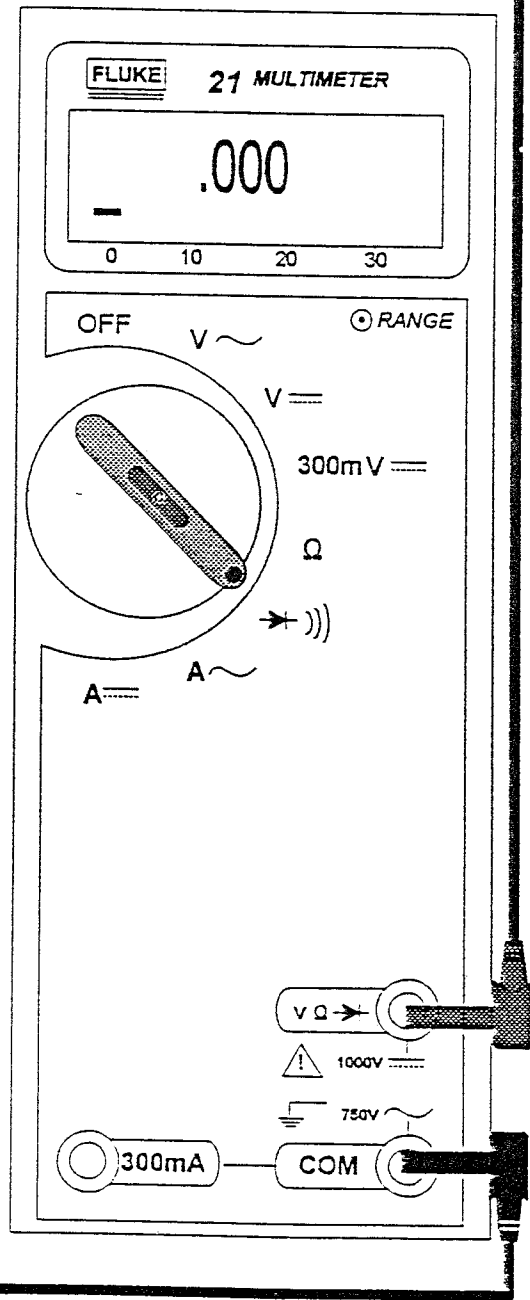
Connected to the REAR RH firebox  
and the air inlet tube.

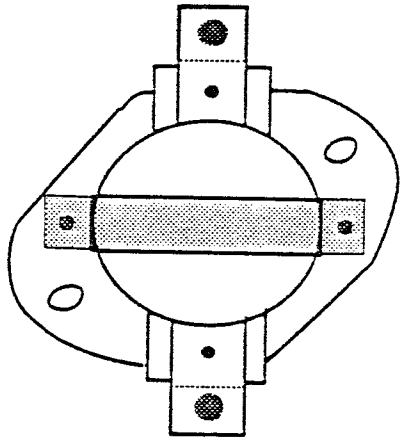
**NOTE:** THE SNAP SWITCH CONNECTED TO THE REAR RIGHTHAND FIREBOX, IS THE HIGH LIMIT PROTECTION SWITCH. IF THE TEMPERATURE RISES ABOVE 250 degees F IN THE TRANSDUCT, THE NORMALLY CLOSED SWITCH WILL OPEN. THIS CUTS ALL POWER TO THE STOVE.

THE SNAP SWITCH LOCATED IN THE AIR INLET TUBE IS NORMALLY CLOSED AND WILL OPEN IF TEMPERATURES RISE ABOVE 250 degees F. THIS WILL CUT POWER TO THE AUGER MOTOR ONLY.



THE NORMALLY CLOSED SWITCH WILL SHOW AS INDICATED.





## LOW LIMIT SNAP SWITCH

PN # 12057601 (CERAMIC)

LOCATED ON THE COMBUSTION FAN  
IF EXHAUST TEMPERATURES EXCEED  
140 degrees F, THE SWITCH CLOSES.

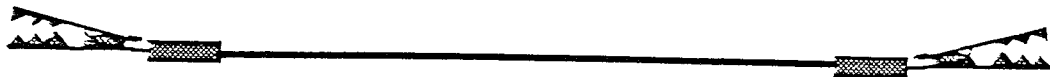
THE SWITCH REMAINS CLOSED UNTIL  
EXHAUST TEMPERATURES DROP BELOW  
120 degrees F.

### NOTE:

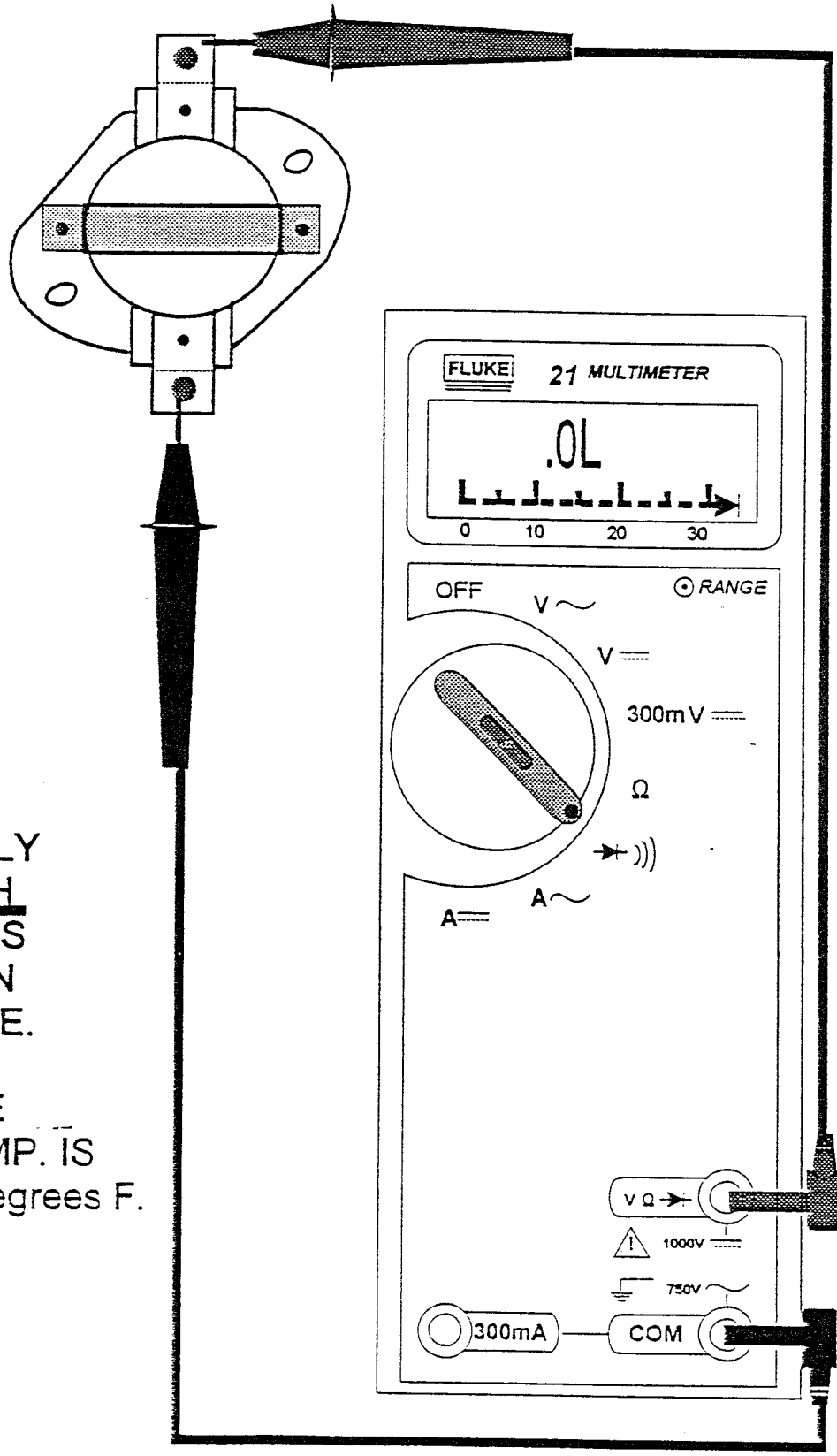
TWO WAYS THIS SWITCH FAILS:

STUCK CLOSED = POWER TO UNIT IS ALWAYS  
ON. THE STOVE MUST BE UNPLUGGED TO SHUT  
IT OFF.

STUCK OPEN = THE STOVE WILL SHUT OFF WITHIN  
30 MIN. FROM START UP.



(SAMPLE JUMPER WIRE USED TO BY PASS)

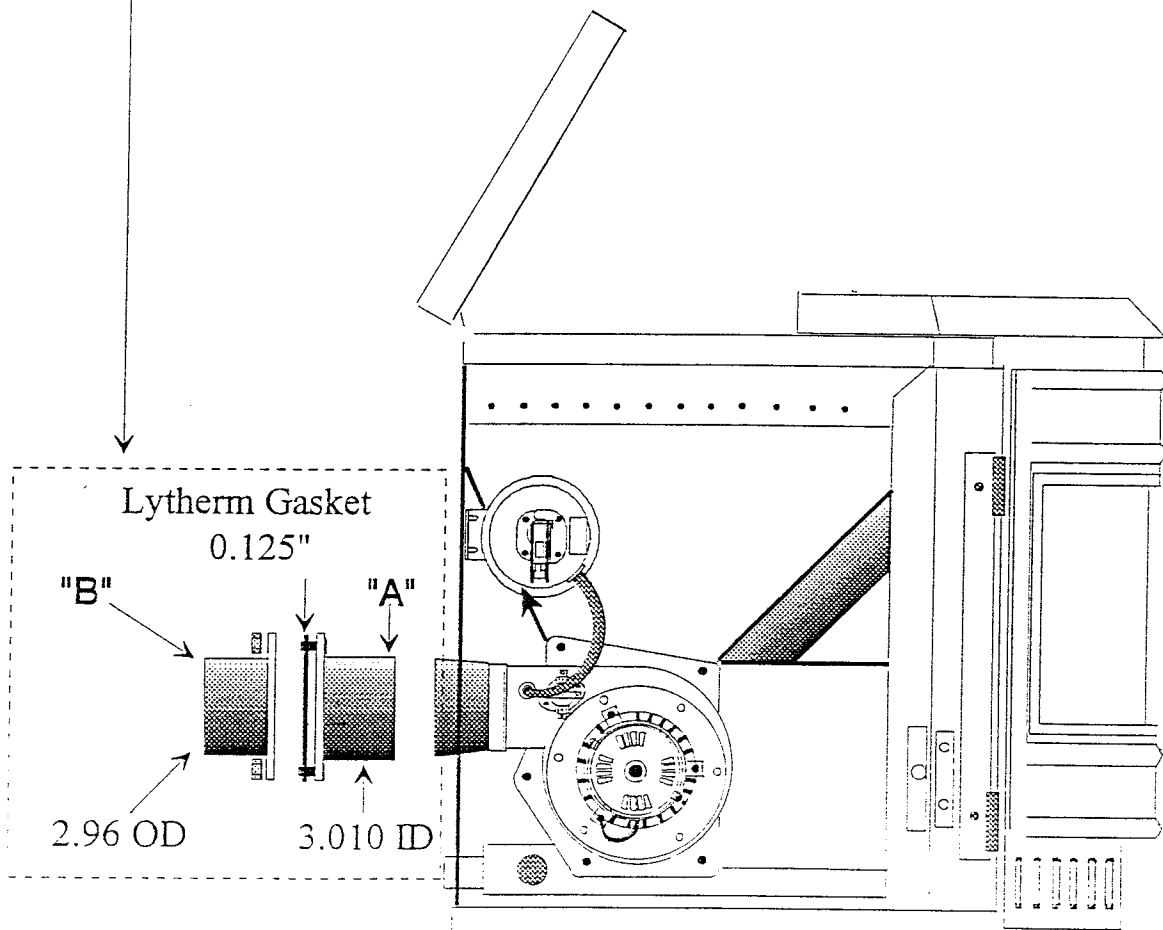


THE NORMALLY OPEN SWITCH WILL SHOW AS INDICATED ON A COLD STOVE.

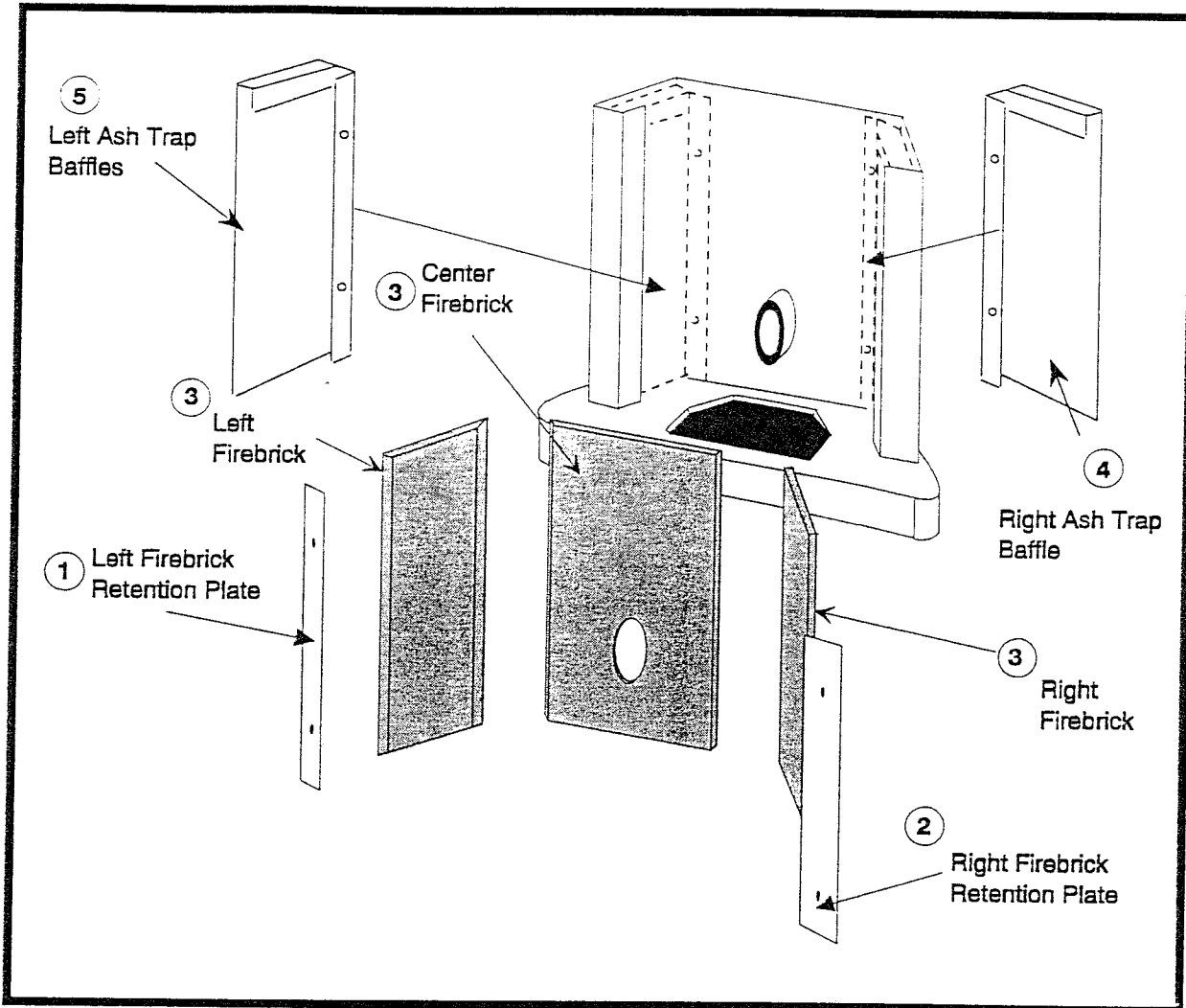
MEANING THE EXHAUST TEMP. IS BELOW 140 degrees F.

# QUICK DISCONNECT PN 12051500

1. Apply RTV on the outside of the exhaust port of the combustion fan and slip Part "A" over the exhaust port.
2. Using four (4) TEK screws , attach part "A".
- NOTE: Insure that one edge of the flange is horizontal
3. Apply RTV on the outside of part "B" and slip inside the PLVent Pipe. NOTE THE POSITION OF FLANGE! THE STUDS MUST LINE UP WITH PART "B" FLANGE HOLES.
4. Using four (4) TEK screws, attach part "B".
5. Place the Lytherm Gasket over the four studs on Part "A".
6. Slide the stove to the PL Vent pipe. Fasten the flanges together using the four (4) lock nuts provided.



# ASH TRAP BAFFLE EXPLODED VIEW



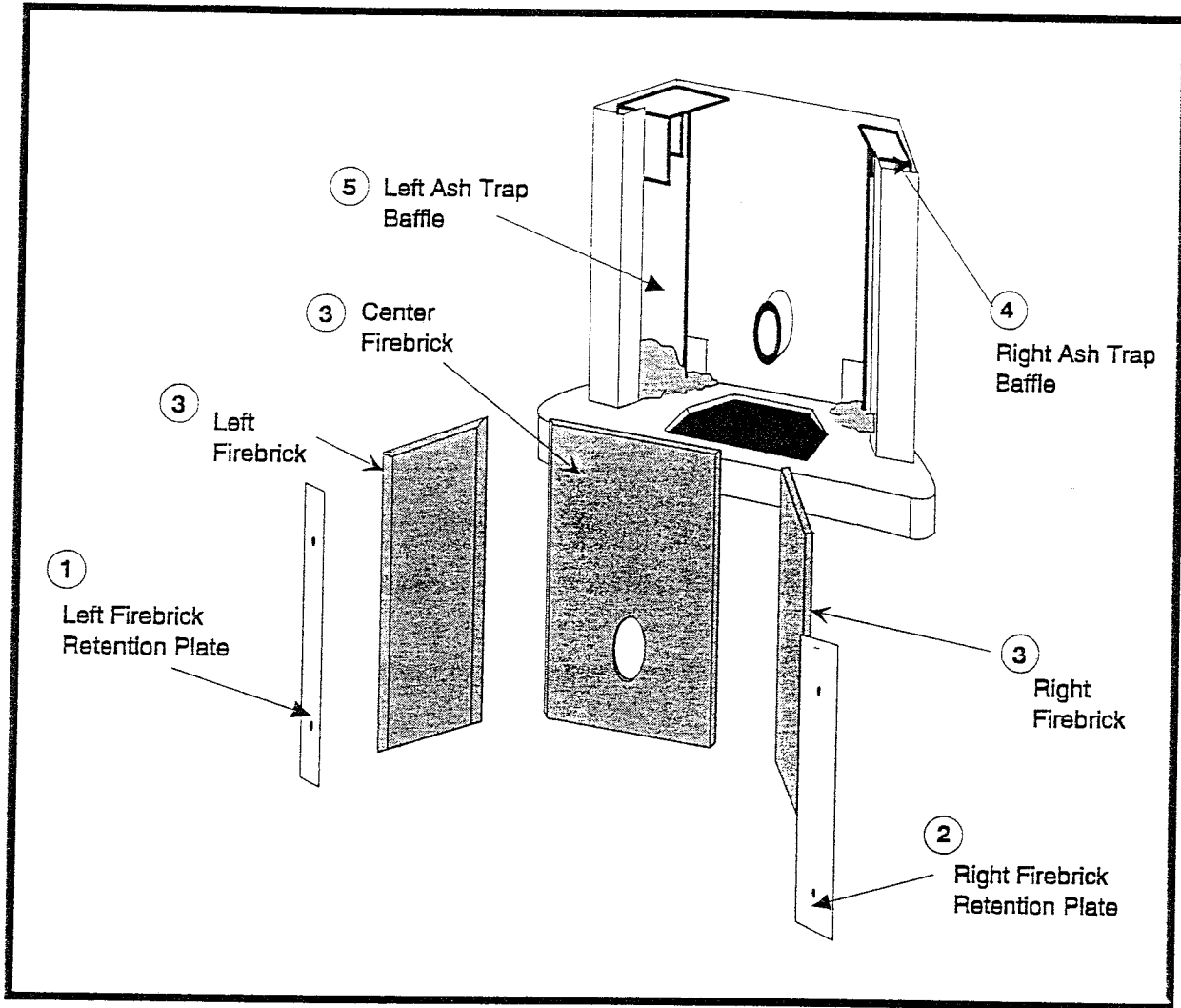
**VALID FOR SERIAL NUMBERS  
#1001 TO #7107 &  
#17626 TO #75863**

ITEM #	Description	Part #
①	Left Firebrick Retention Plate	12100101
②	Right Firebrick Retention Plate	12100102
③	Firebrick Panel Kit	12146500 (all three pieces in one set)
④	Right Ash Trap Baffle	12151902
⑤	Left Ash Trap Baffle	12151900

*mm*



# '94 ASH TRAP BAFFLE EXPLODED VIEW



VALID FOR SERIAL NUMBERS AFTER #75864

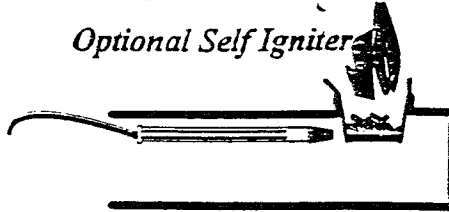
ITEM #	Description	Part #
①	Left Firebrick Retention Plate	12100101
②	Right Firebrick Retention Plate	12100102
③	Firebrick Panel Kit	12146500 (all three pieces in one set)
④	Right Ash Trap Baffle	} 12141920 (comes as kit)
⑤	Left Ash Trap Baffle	

# FASTFIRE IGNITOR TROUBLE SHOOTING

# Whitfield

## *FAST FIRE!*

*Optional Self Igniter*



### SEQUENCE OF OPERATION

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#### Press the Start Switch

- The Combustion fan will start
- The Convection fan will start
- The Fast Fire relay will be activated

#### → Slide the Auger On switch to the on position

- The Auger motor will start
- Pellets will fall into the grate

#### → Within ten minutes

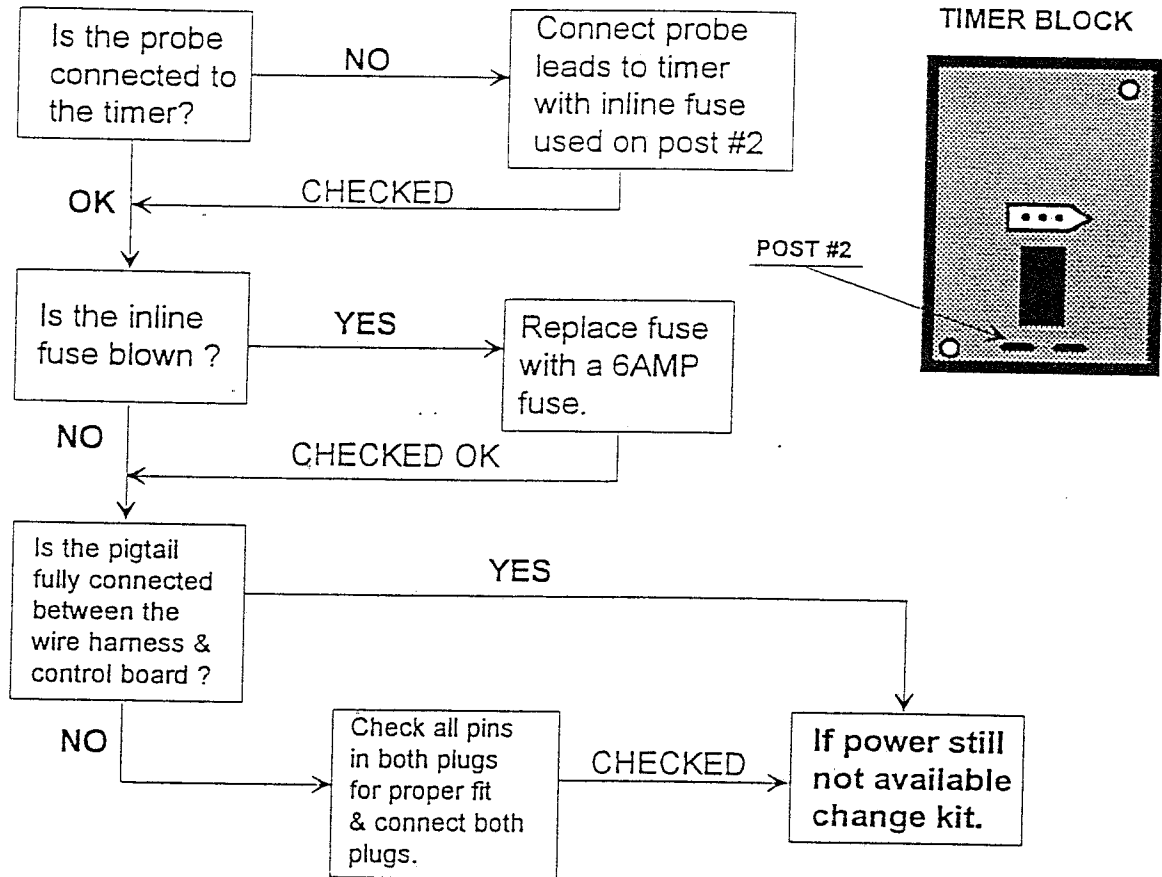
- Ignition will occur

#### → Within 15 minutes

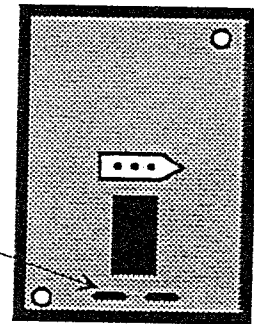
- Fast Fire relay will shut off

# FASTFIRE TROUBLE SHOOTING

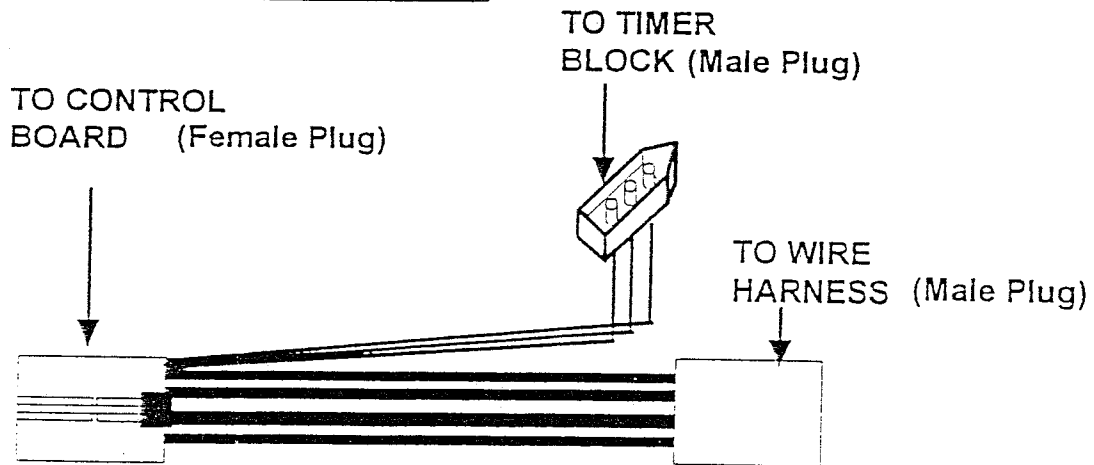
1. The probe does not heat up, does not get Red in color, indicating no power.



TIMER BLOCK



POST #2



PIG TAIL WIRE HOOKUP

# FASTFIRE TROUBLE SHOOTING

2. The probe does heat up, (Red in color), but fails to ignite the pellets in the 15 minutes of the "Timer" run.

