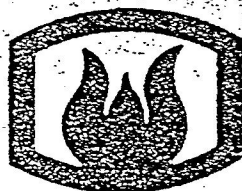
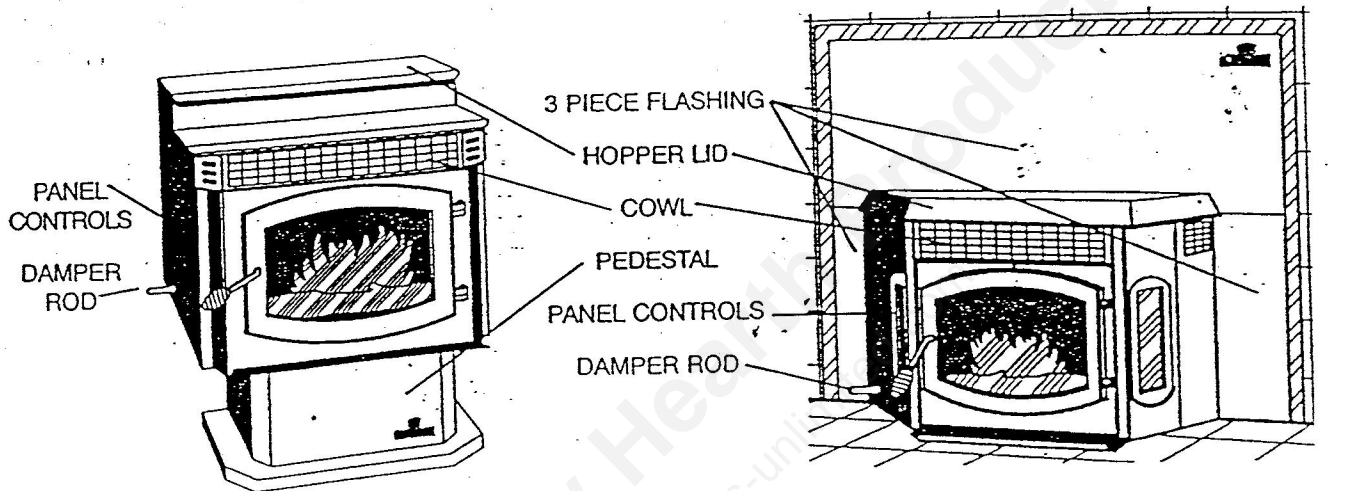


Pellet Stoves



B R E C K W E L L

"TRADITION SERIES"

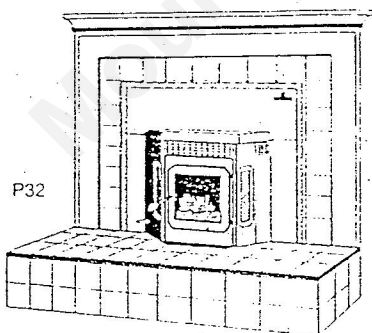


P24FS FREESTANDING

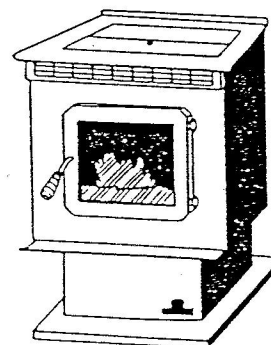
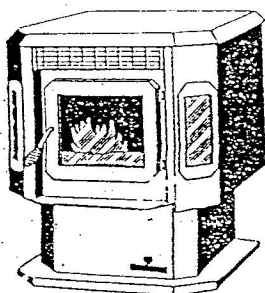
P24I FIREPLACE INSERT/BUILT-IN FIREPLACE

C A D E T
BY BRECKWELL

SERIES

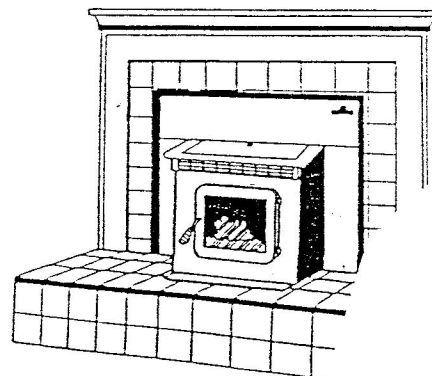


P32

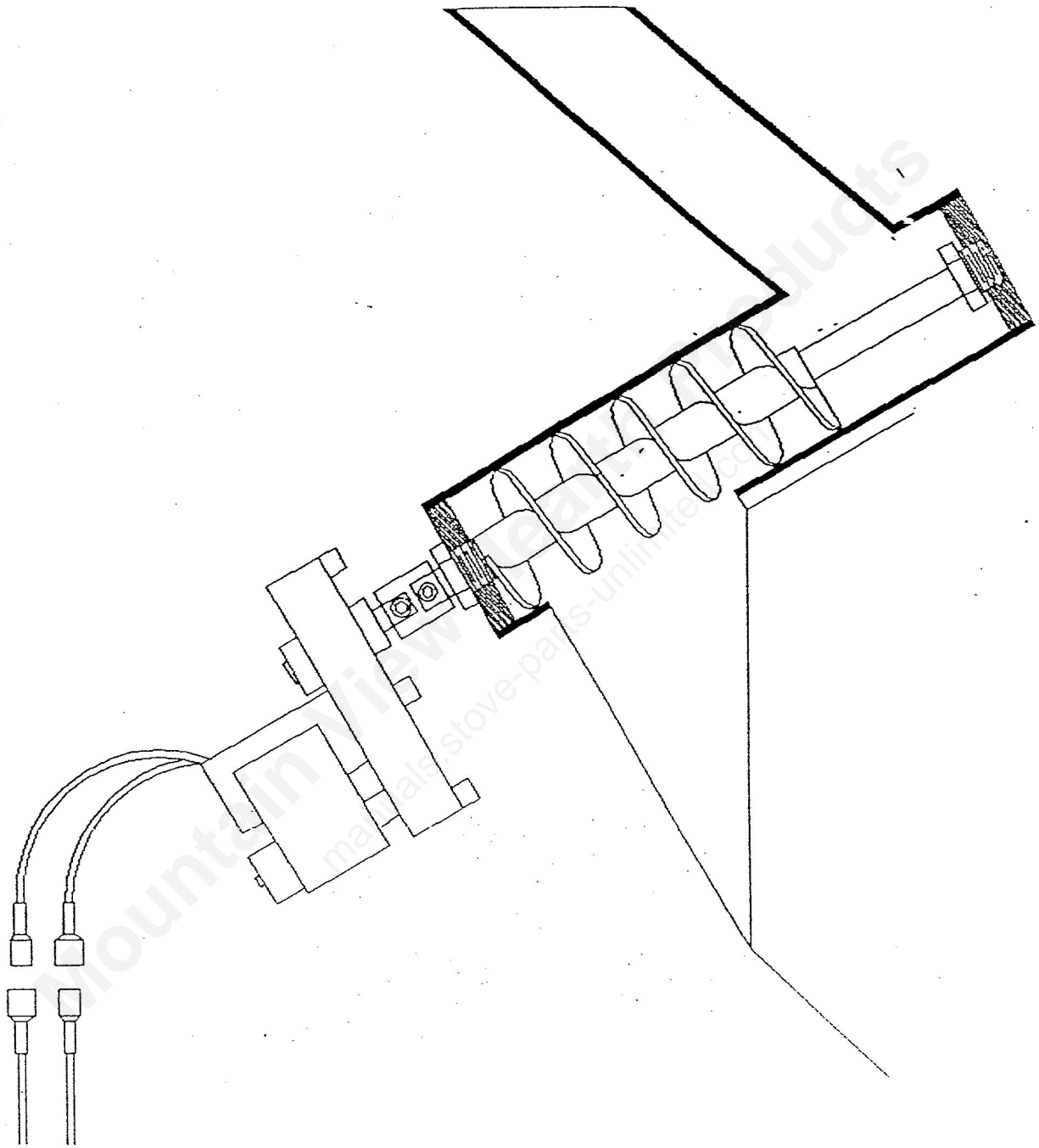


P22FS

Charm



P22I

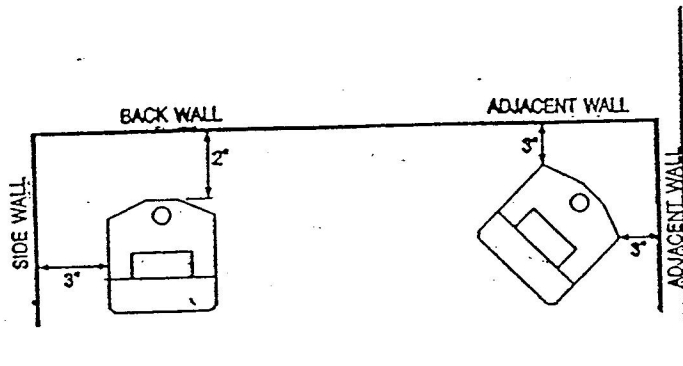


P24, P32 & P26 AUGER SYSTEM

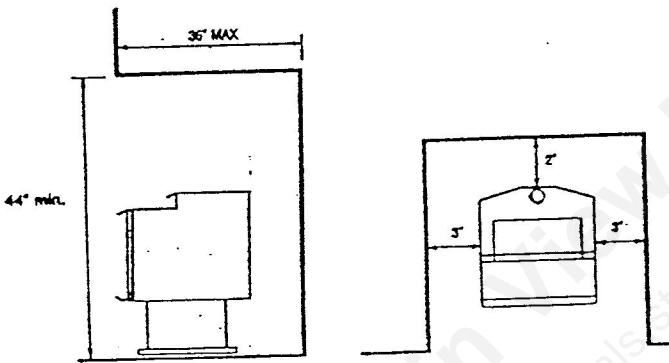
joints) non-combustible material such as ceramic tile, cement board, brick, 3/8" asbestos millboard or equivalent, or other approved or listed material suited for floor protection. Check local codes for approved alternatives.

Clearances are measured from the sides, back and face (door opening) of stove body (see figure 1A).

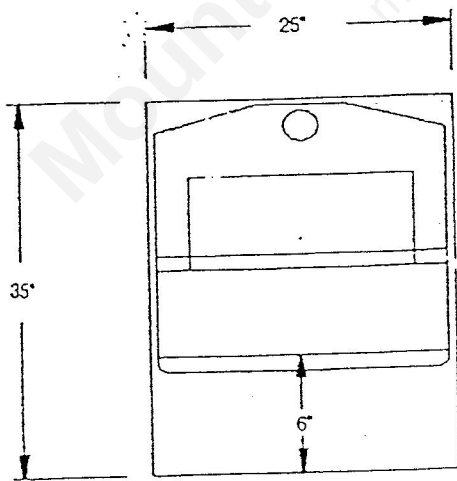
DO NOT USE MAKESHIFT MATERIALS OR COMPROMISES IN THE INSTALLATION OF THIS UNIT.



SIDEWALL CLEARANCES



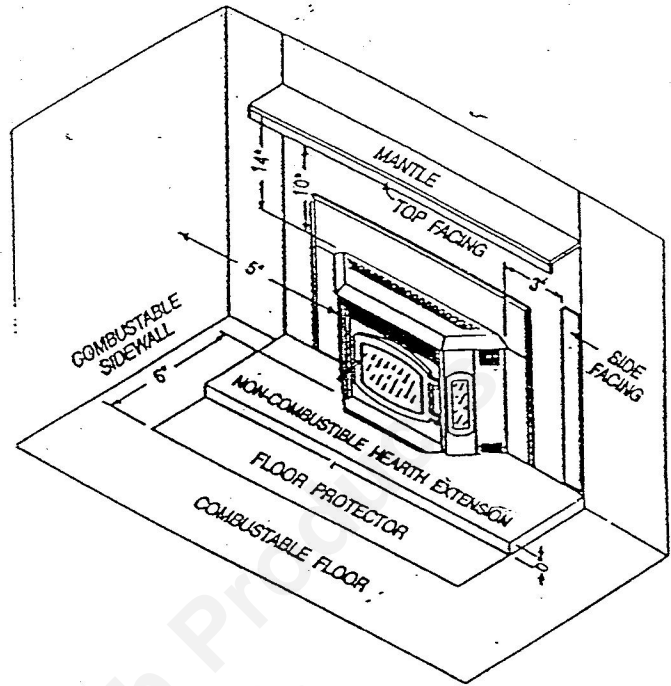
ALCOVE CLEARANCES



FLOOR PROTECTION
(Minimum 25" wide x 35" deep)

P24FS

Figure 1A

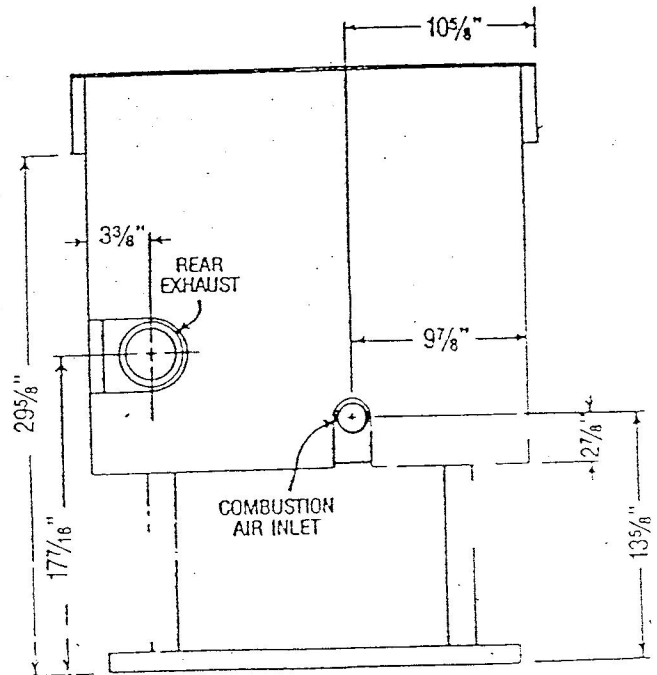


P24I

Figure 1B

2.3 COMBUSTION AIR SUPPLY

For mobile home installation the stove must be connected to an outside source of combustion air. A 1 1/4" inside diameter metallic pipe, either flexible or rigid should be used when outside air is to be connected. It attaches to an outlet at the stove's rear (see figure 2) and its terminus should have a wind hood or be turned 45° to prevent overdraft when located on windy side of home. In some cases rodent guards are suggested.

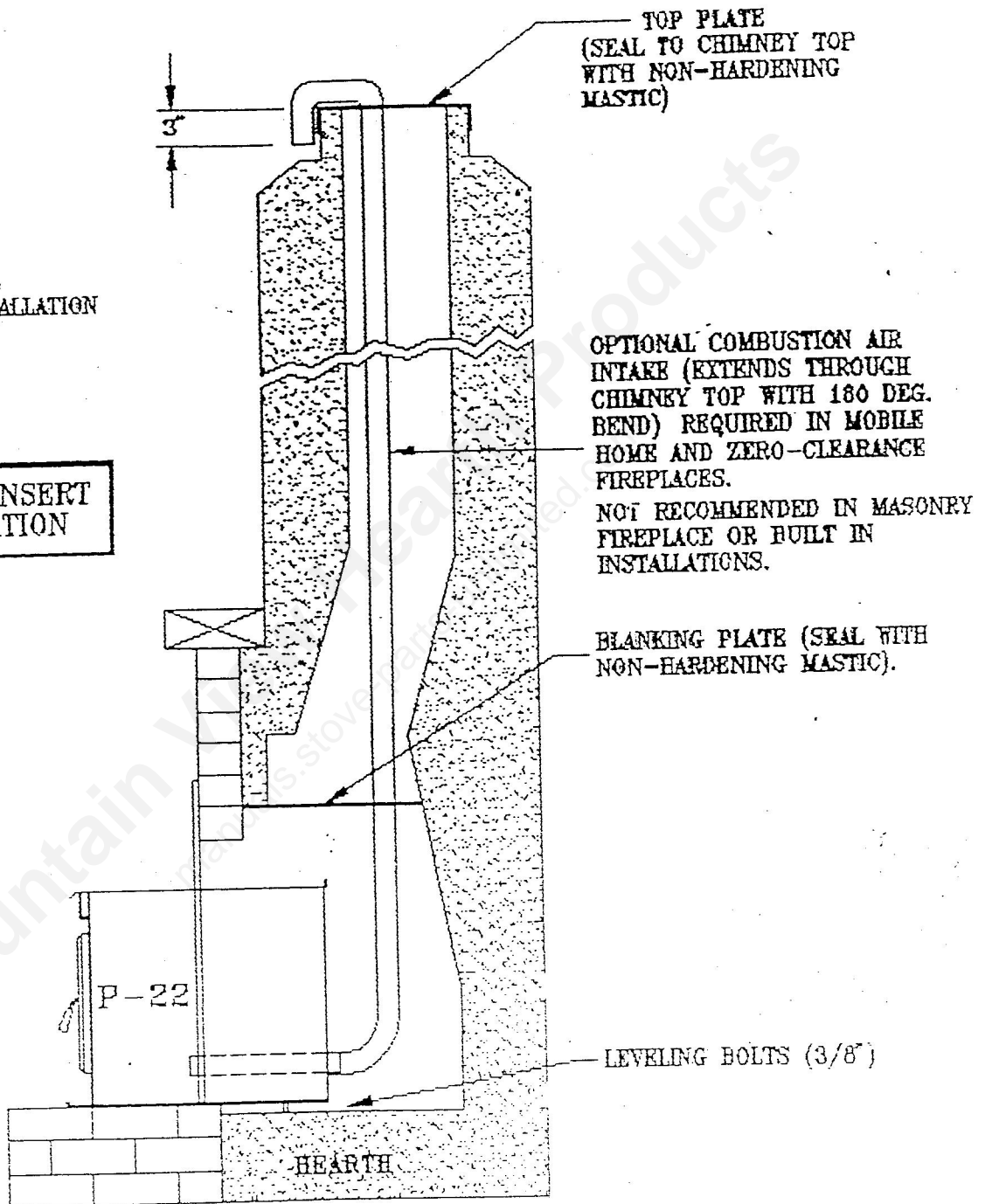


P24FS REAR VIEW

Figure 2A

NOTE:
FOLLOW METAL
CHIMNEY INSTALLATION
INSTRUCTIONS

**FIREPLACE INSERT
SIDE ELEVATION**



OUTSIDE COMBUSTION AIR INSTALLATION

FIGURE 4

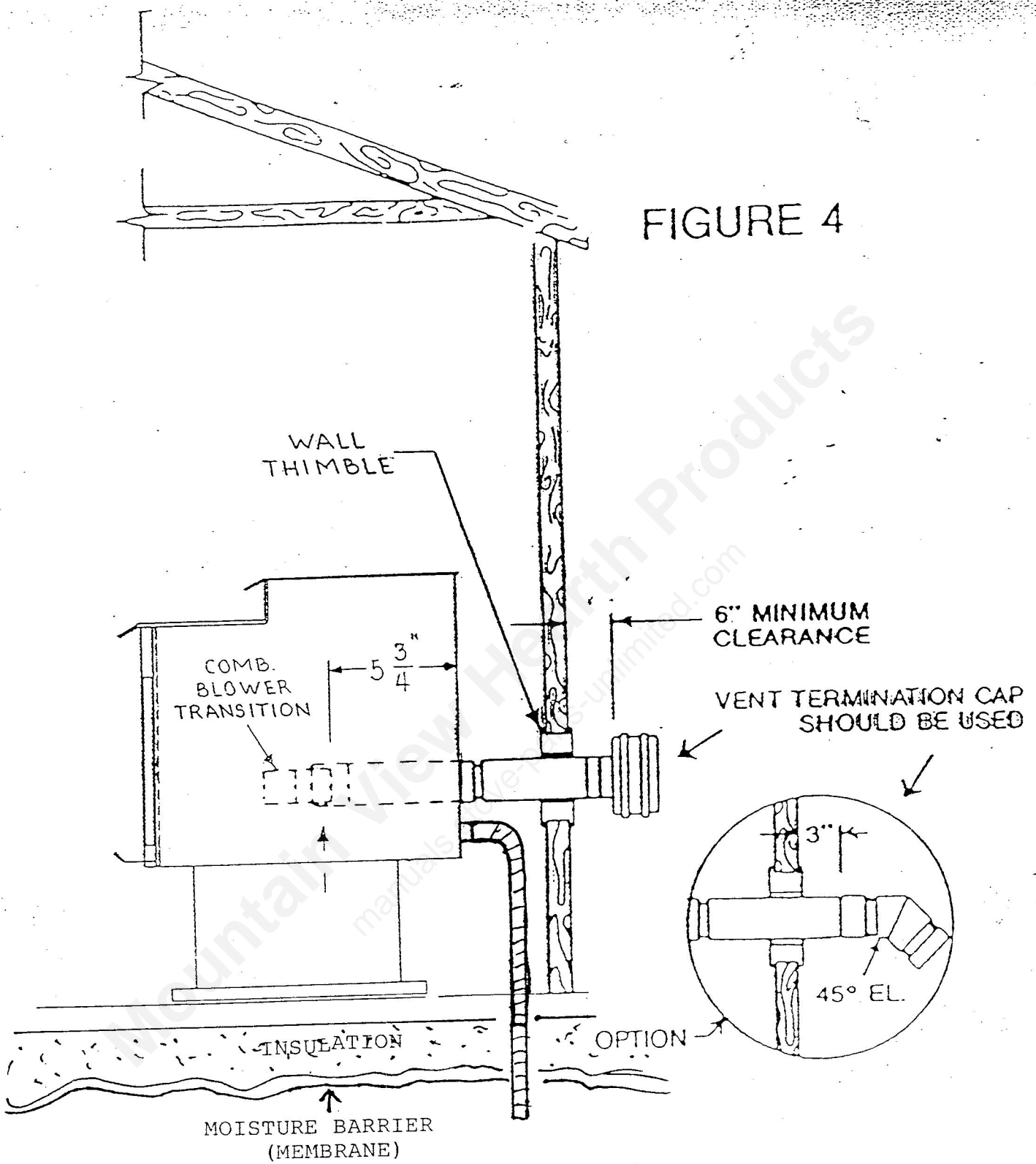


FIGURE 4

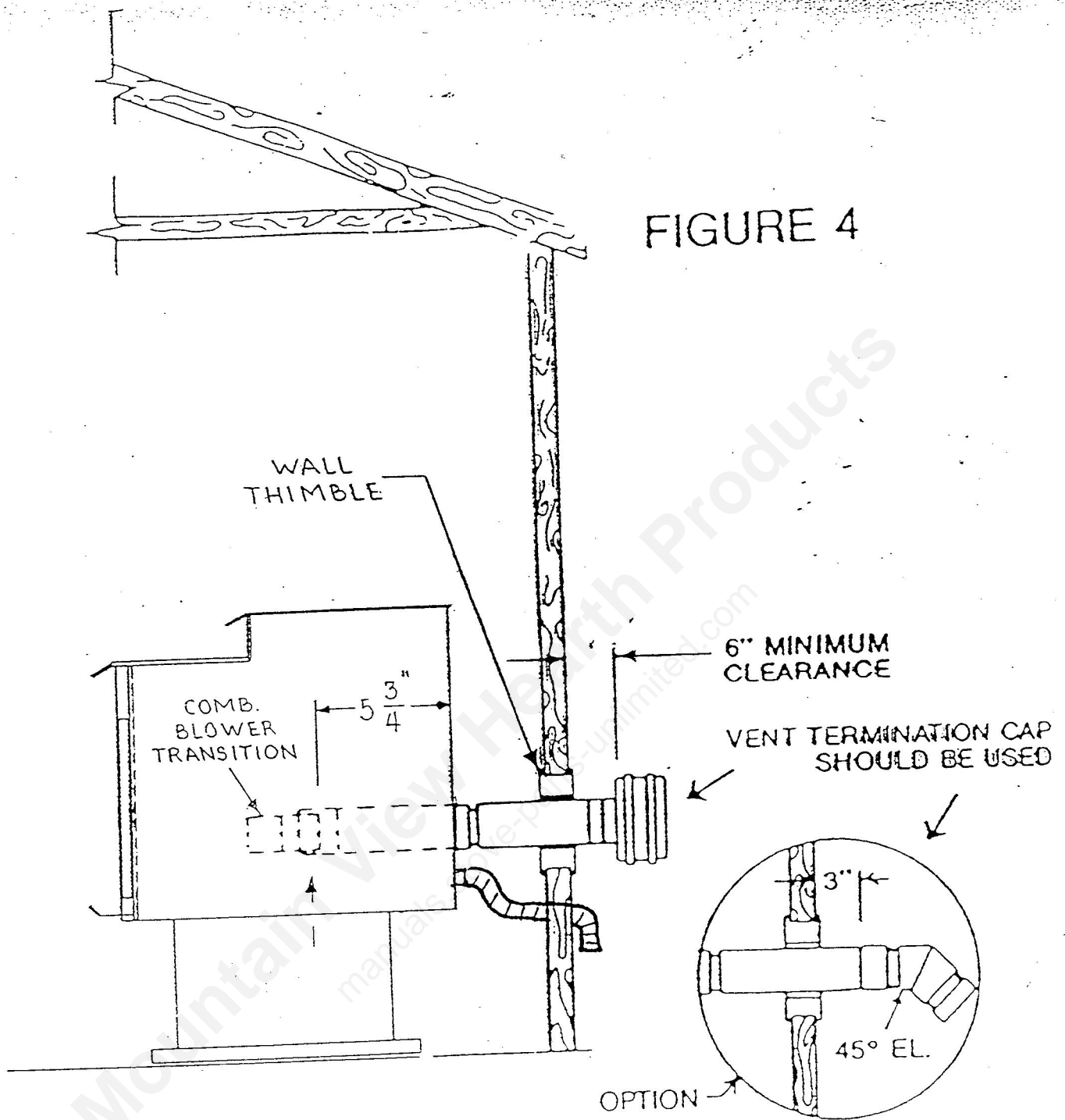
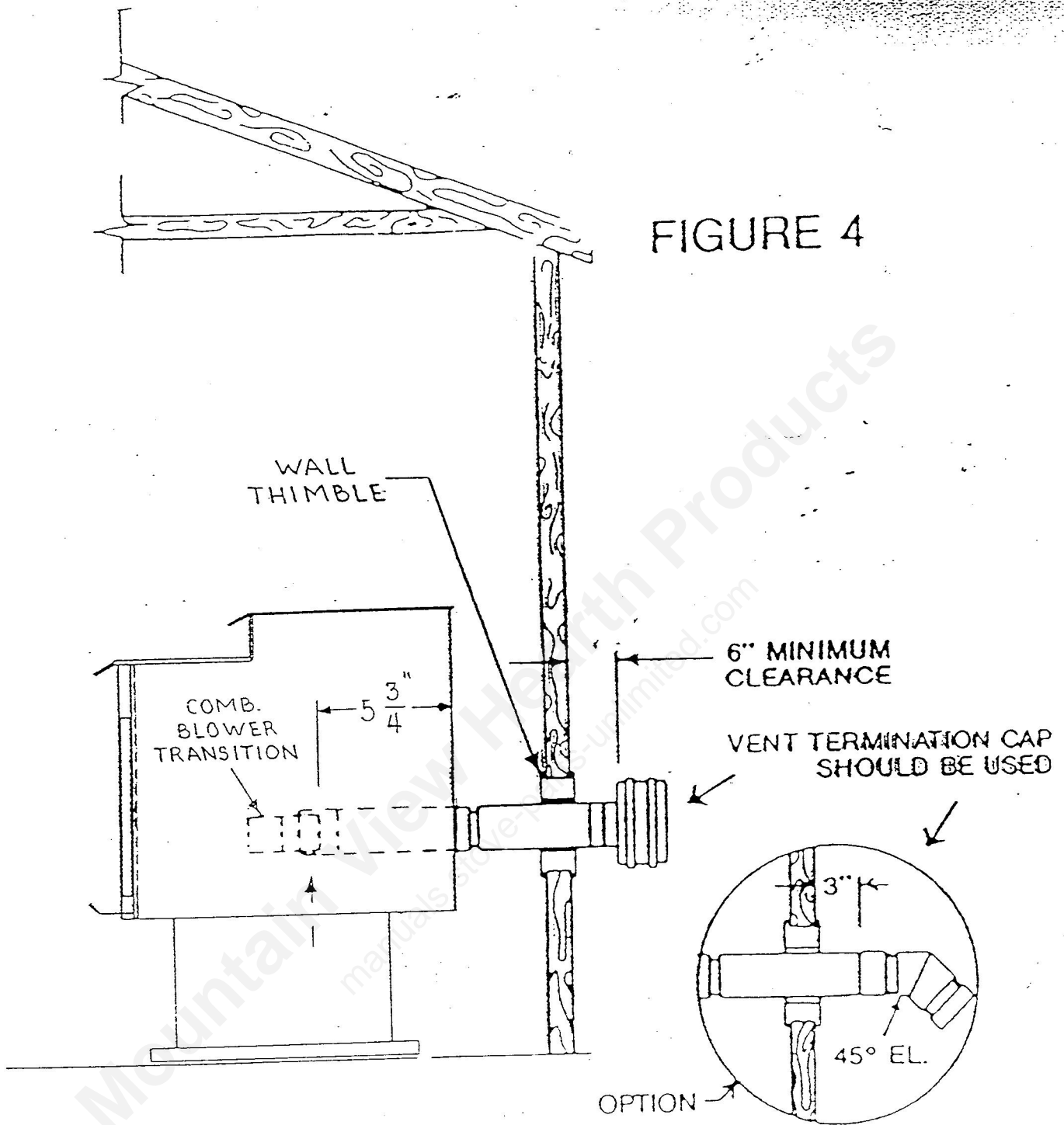


FIGURE 4



Equivalent Vent Length (EVL)

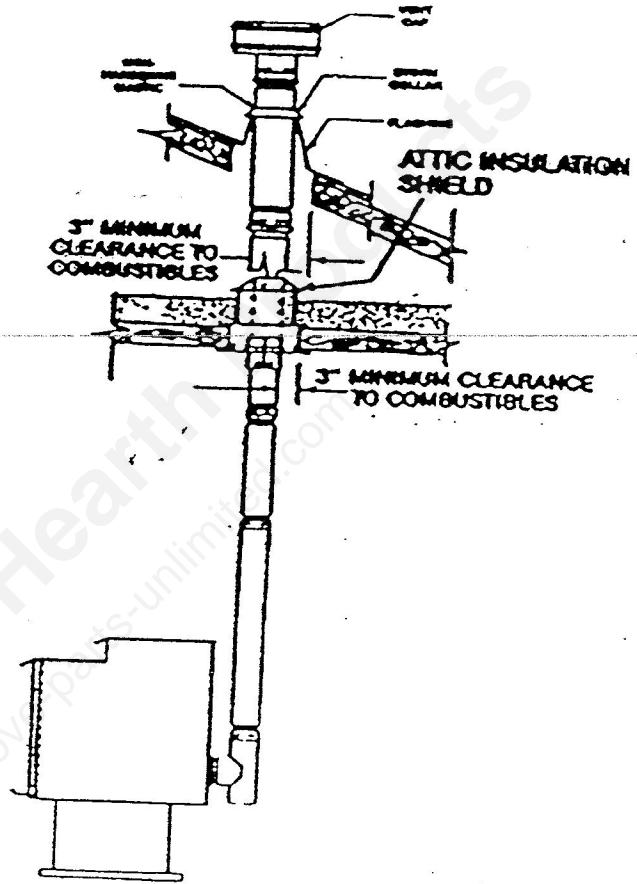
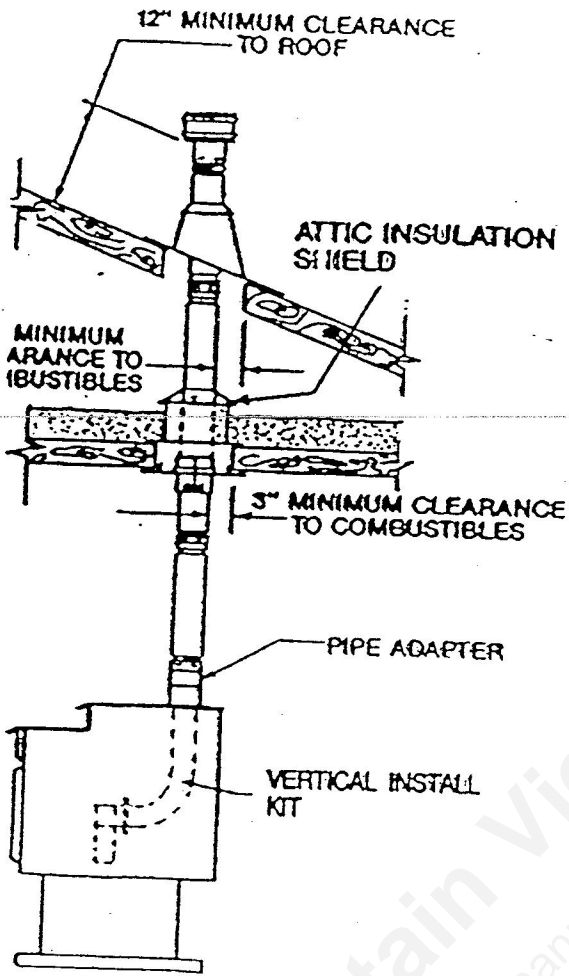
The longer the run of pipe in your installation (both with inserts and freestandings), the more restriction there is in the system. Therefore, larger diameter pipe should be used. Here is how you determine whether 3" or 4" should be used in your installation.

If you have over 15 feet of equivalent vent length, we recommend the use of 4" pipe.

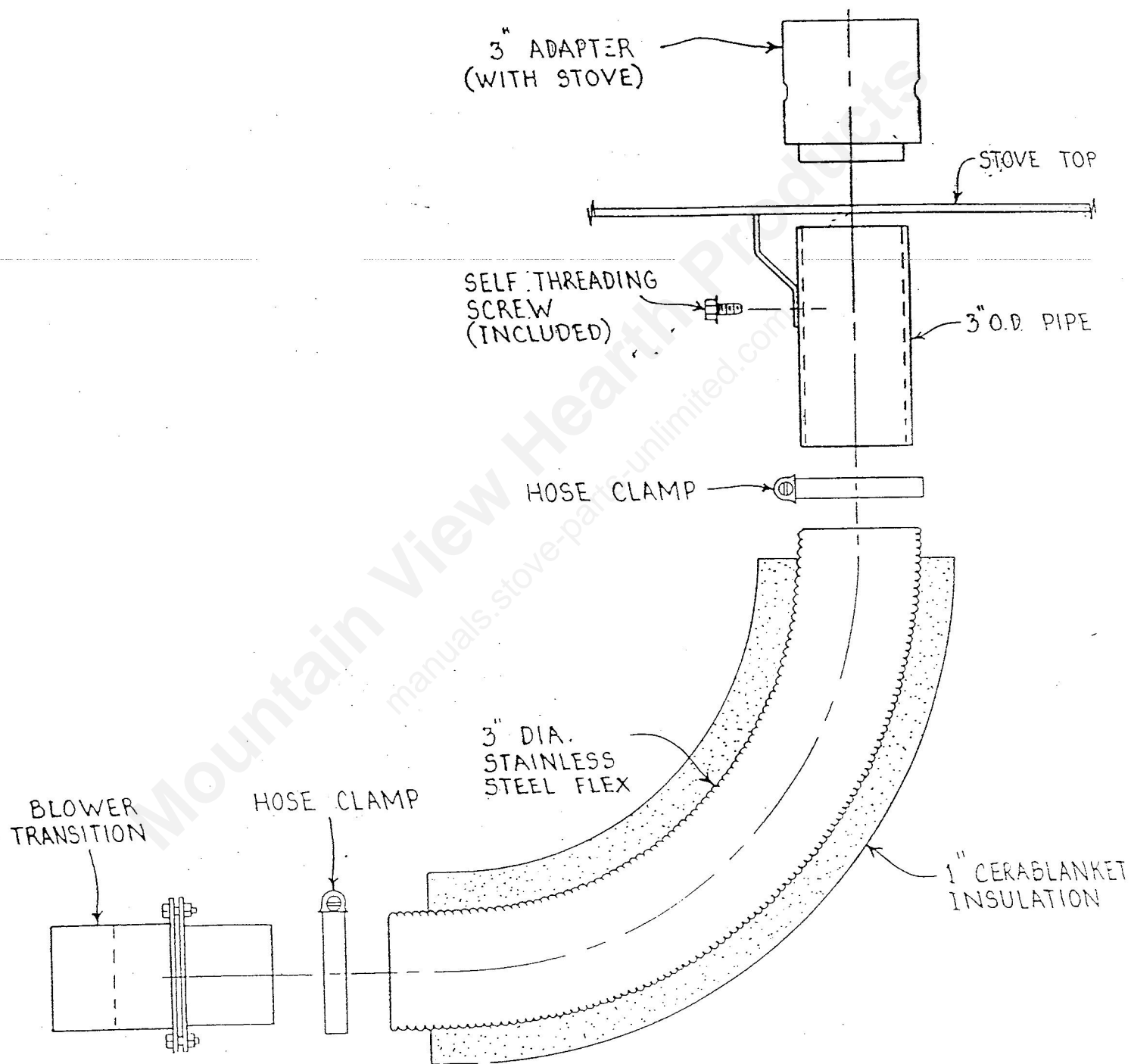
To calculate EVL, use the following conversions:

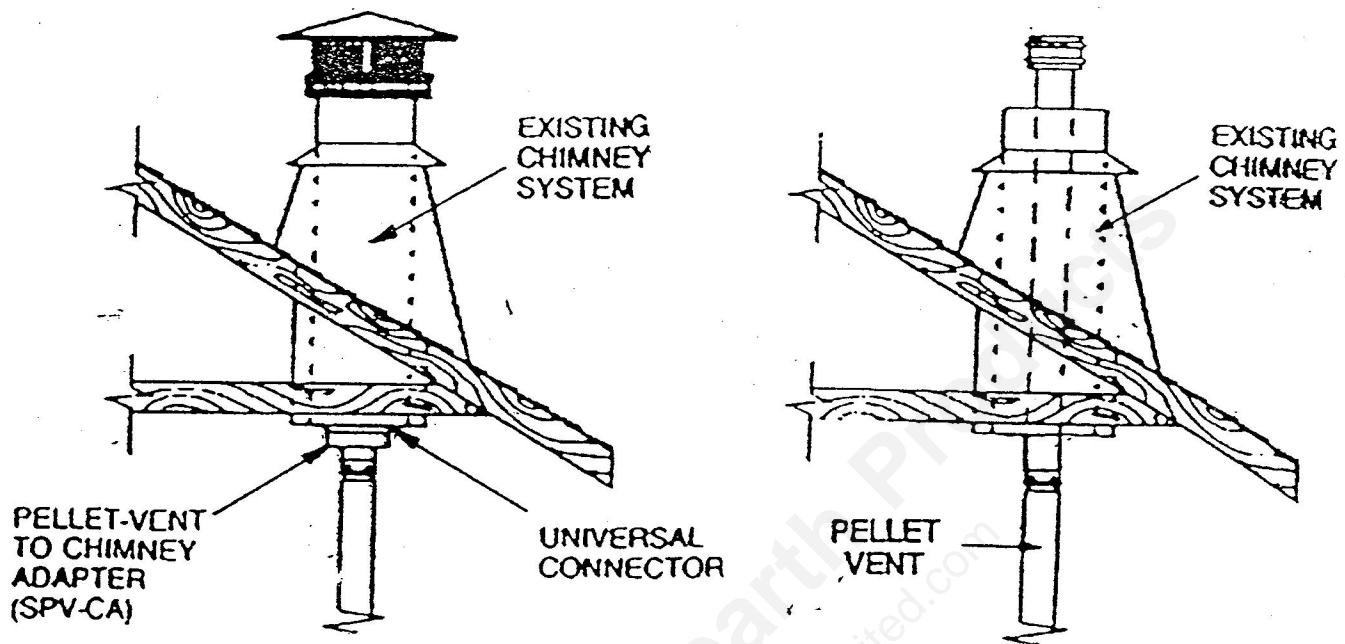
90° elbow or "T"	= 5 equivalent feet
45° elbow	= 3 equivalent feet
Horizontal Pipe Run	= 1 equivalent foot per actual foot
Vertical Pipe Run	= 0.5 equivalent feet per actual foot

NOTE: At altitudes above 3,000 feet, we suggest the use of 4" diameter vent at an EVL of 7 feet.



VERTICALLY WITH NEW CHIMNEY





PREFERRED METHOD

VERTICALLY USING EXISTING CLASS "A" CHIMNEY

Figure 6

Figures 10A & 10B describe a P241 installation vented into either a special chase built outside an outer wall or a false inside wall. This is especially suited for new construction or remodeling. The chase dimensions shown are minimums and must be maintained.

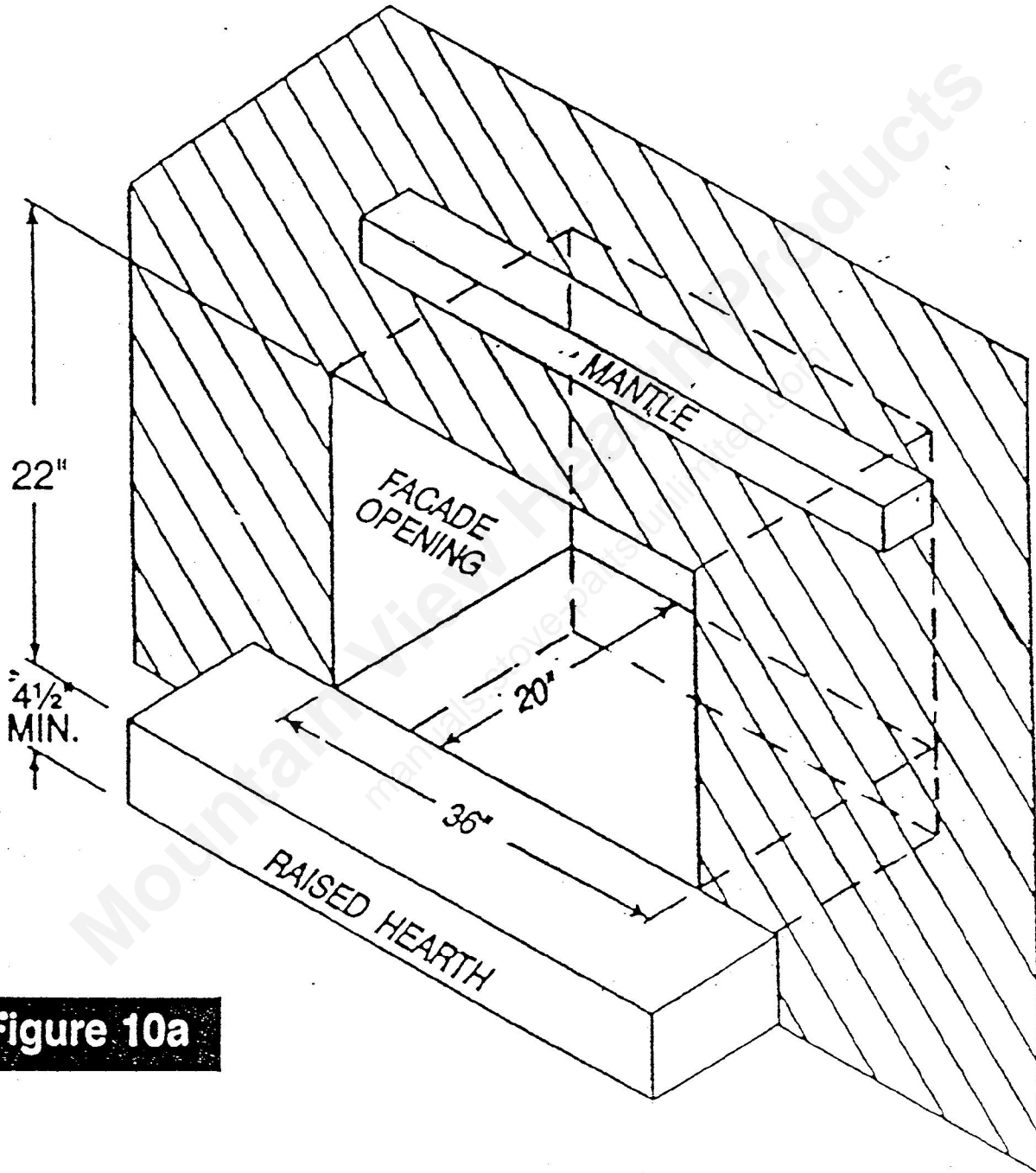
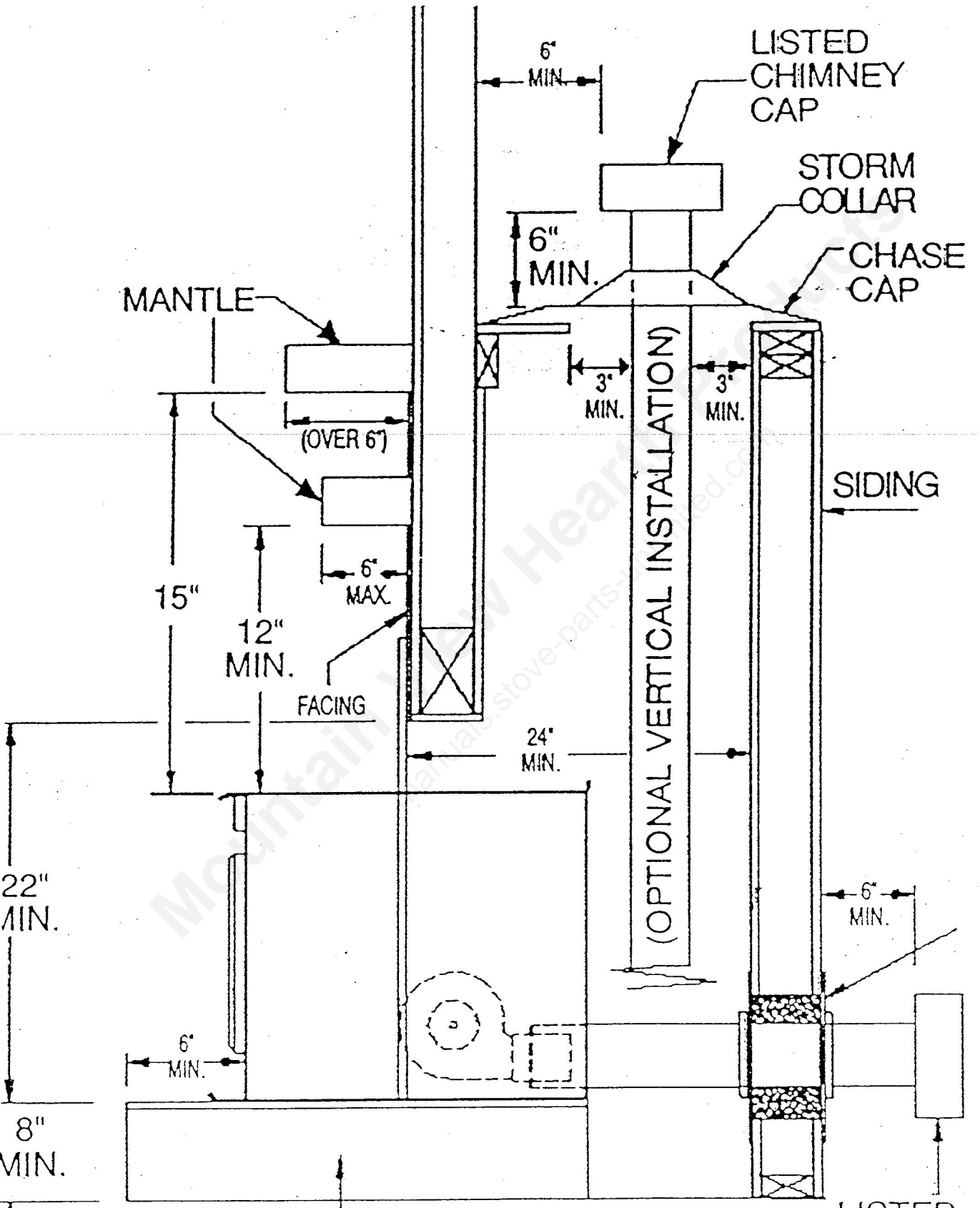


Figure 10a

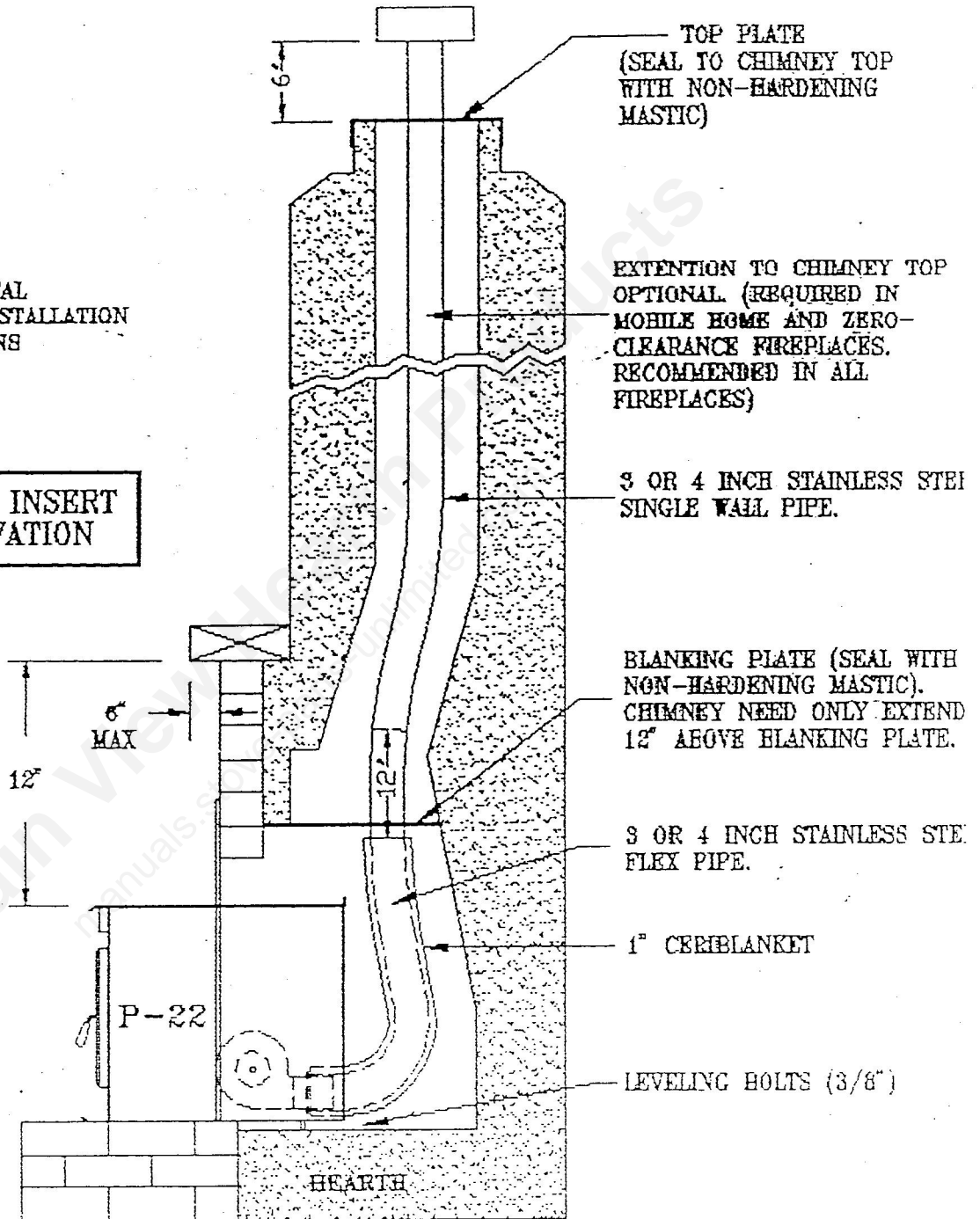


RAISED HEARTH MUST BE BUILT OF 8" HOLLOW CONCRETE BLOCKS.

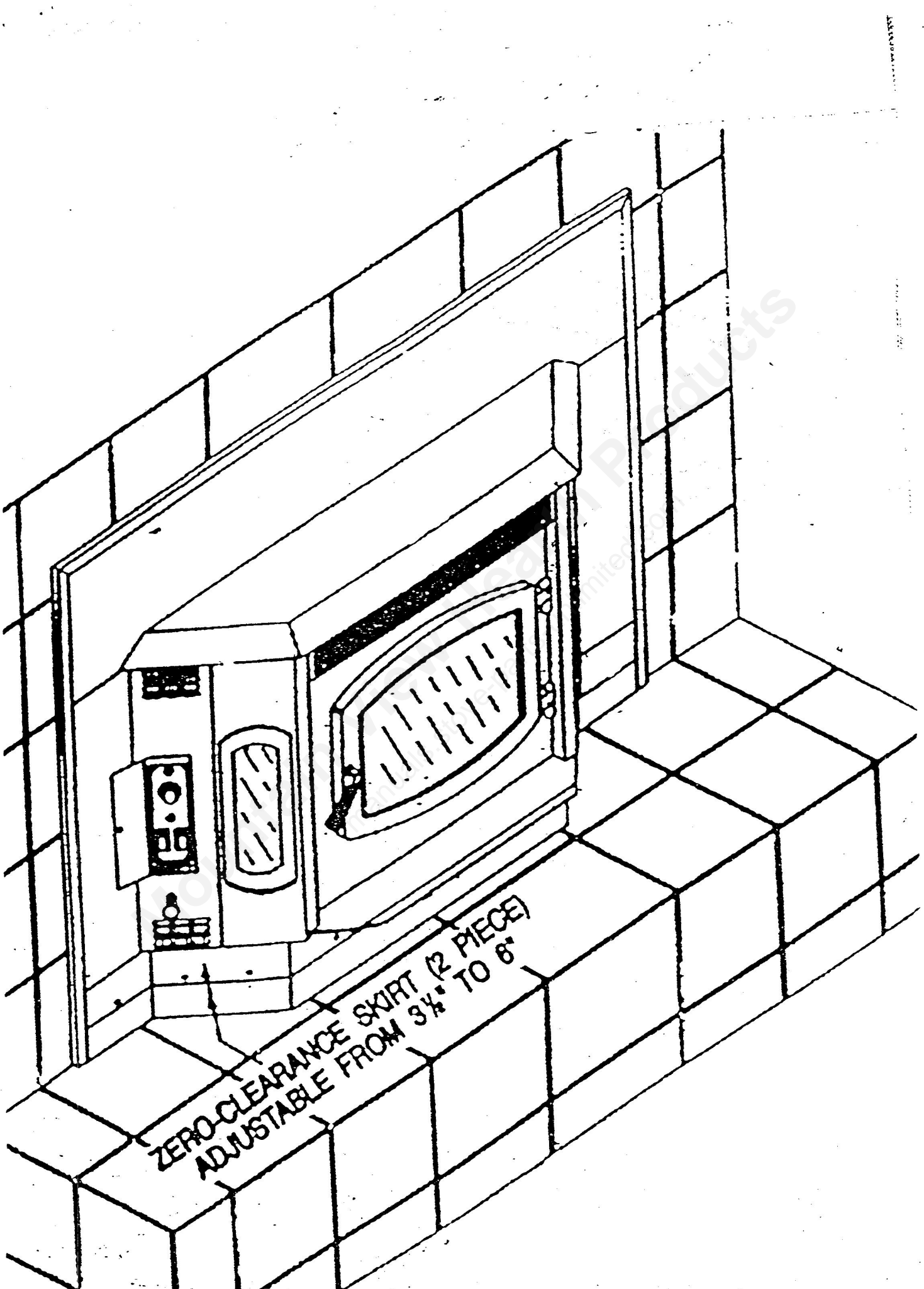
NOTE:
FOLLOW METAL
CHIMNEY INSTALLATION
INSTRUCTIONS

**FIREPLACE INSERT
SIDE ELEVATION**

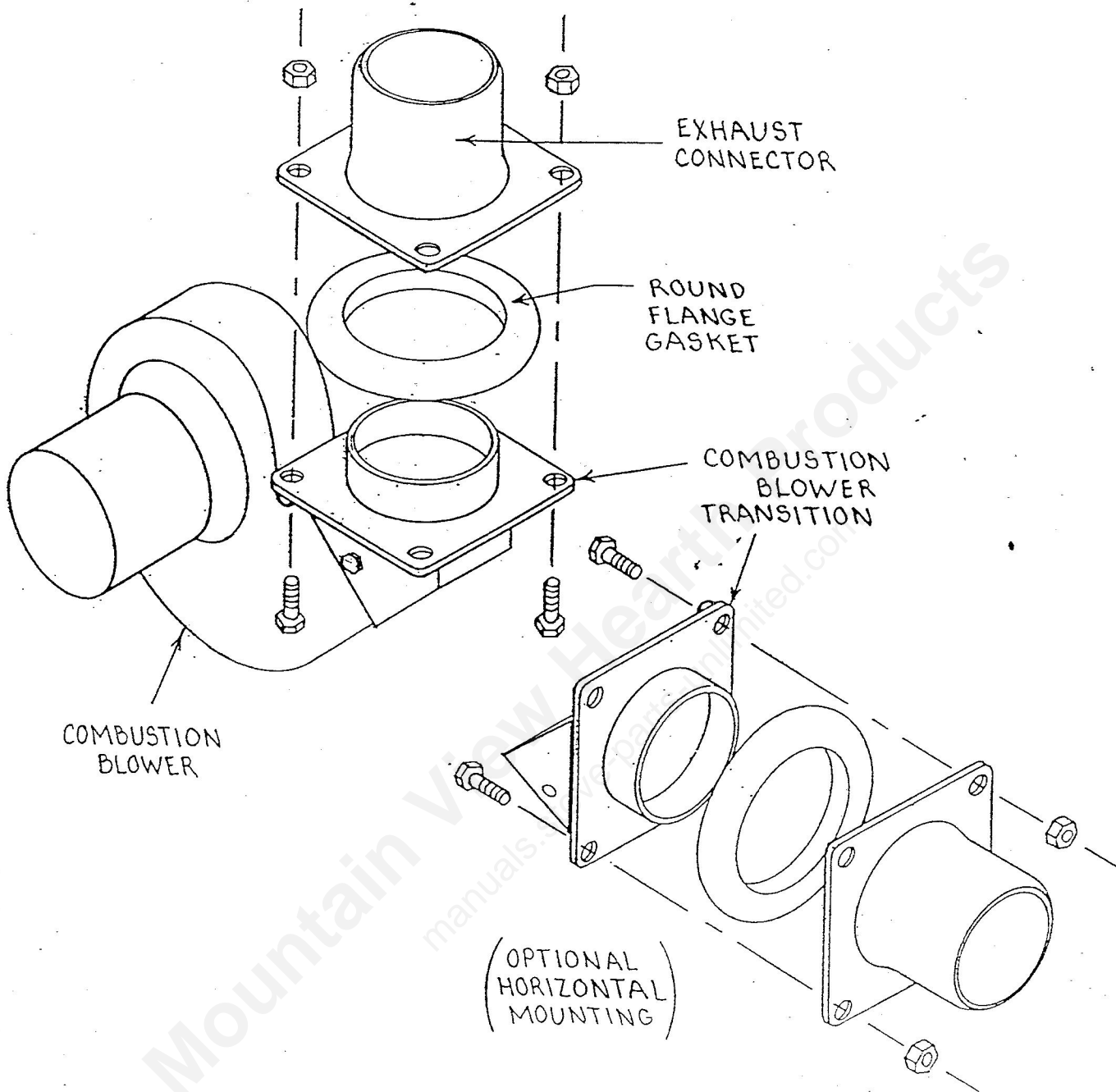
NOTE:
WHEN MANTLE EXTENDS
MORE THAN 6" FROM
FIREPLACE FACE A 15"
MIN. DIMENSION MUST
BE MAINTAINED FROM
STOVE TOP TO BOTTOM
OF MANTLE.

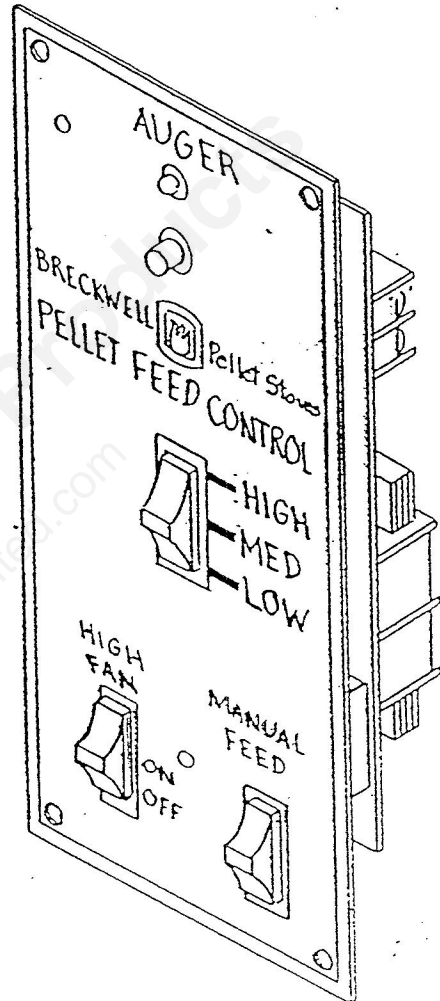
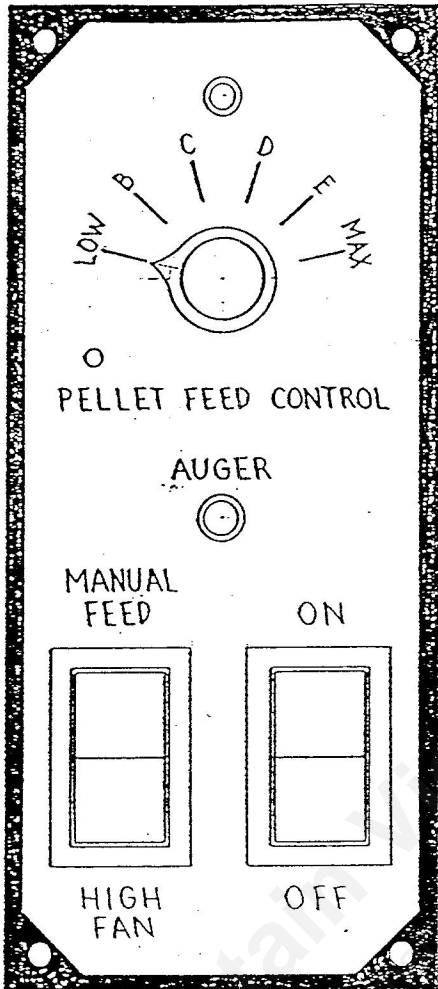


EXHAUST PIPE INSTALLATION



ZERO-CLEARANCE SKIRT (2 PIECE)
ADJUSTABLE FROM 3 1/2" TO 8"

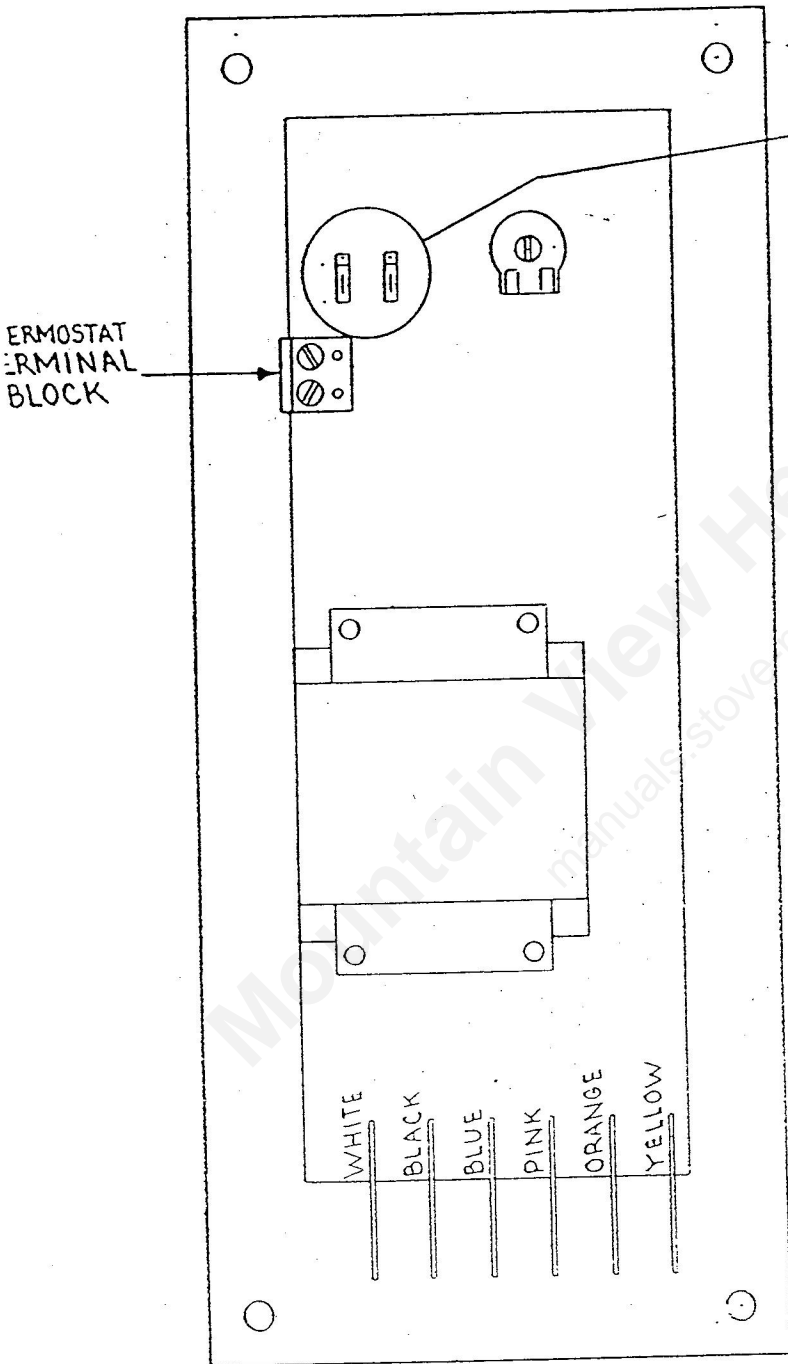




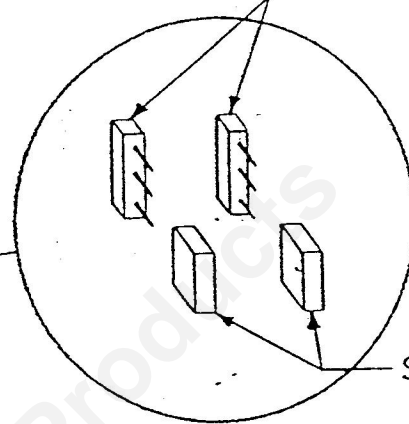
P24, P26 & P32

P22

FIG. 1

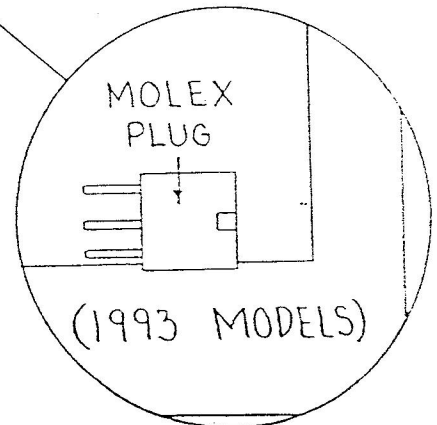


JUMPERS

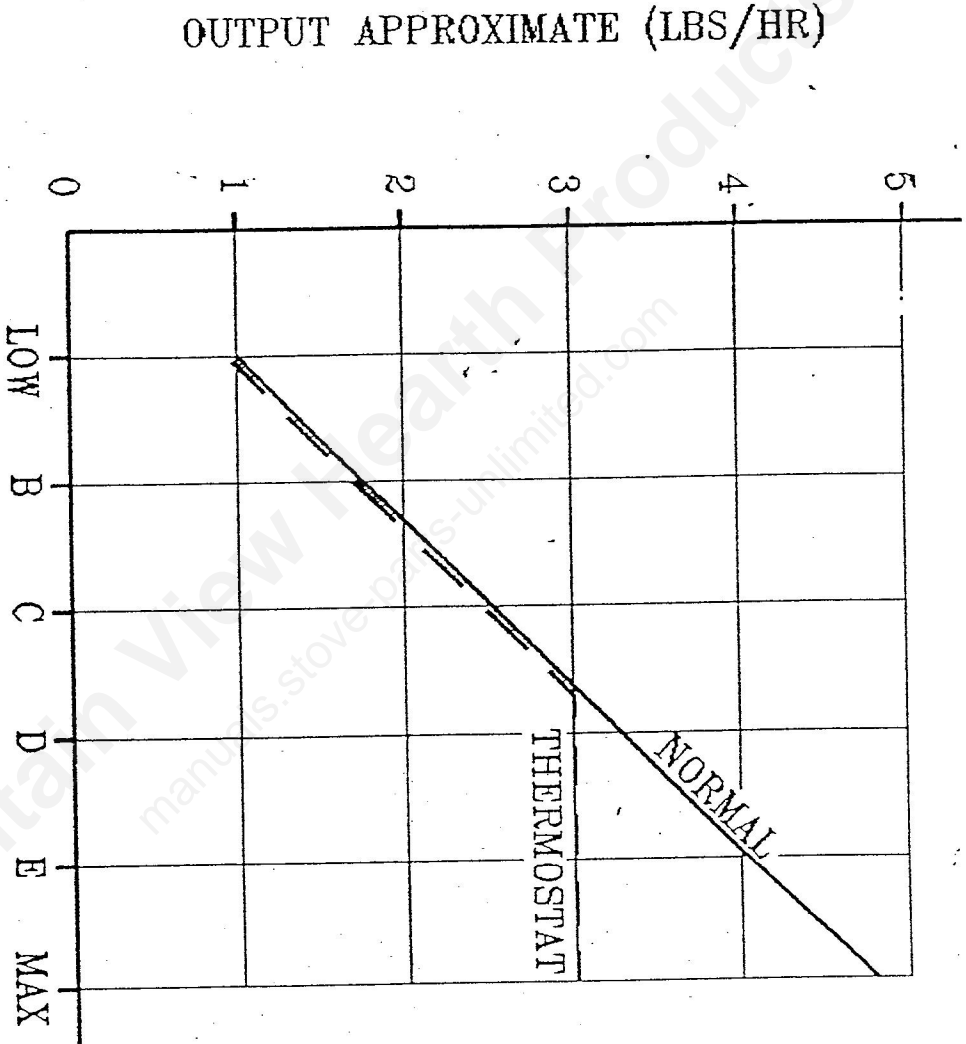


REAR VIEW OF CIRCUIT BOARD / CONTROL PANEL PLATE

MOLEX
PLUG



NORMAL / THERMOSTAT OUTPUT OPTIONS



PELLET FEED CONTROL SELECTION

BRECKWELL MODEL P24 & CADET SERIES (AFTER 92)

INSTALLATION OF THE THERMOSTAT OPTION CHANGES THE PELLET FEED RATE TO THE ABOVE OUTPUTS.

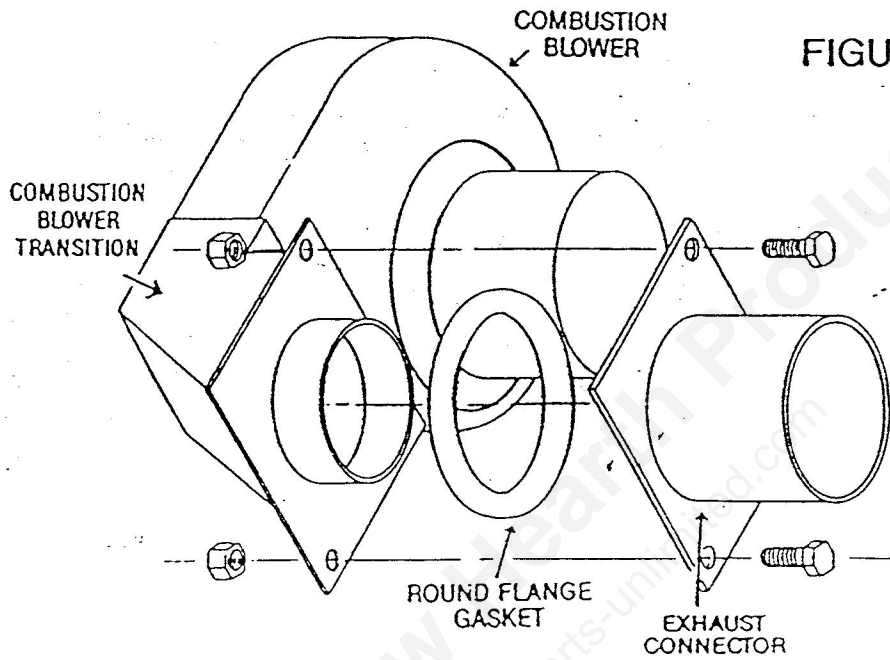


FIGURE 13

4.5 RECOMMENDED MAINTENANCE SCHEDULE

Use this as a guide under average use conditions.

	Daily	Twice Weekly	Monthly or per ½ ton	Annually
Burn pot	stirred	emptied		
Clean Glass	wiped			Air Wash Plate re-moved Clean
Combustion Chamber		brushed		
Firebox		emptied		
Exhaust Passage			vacuumed	
Heat Exchange Tubes		two passes		
Combustion Blower Blades			vacuumed brushed	
Fan Motors				vacuumed oiled
Vent System				cleaned
Gaskets				inspected

Gasket around door and door glass should be inspected and repaired or replaced when necessary (see section 6.0).

BRECKWELL MAGNETHELIC READINGS

- MEASURE WITH 1/8" COPPER TUBE INSERTED BETWEEN DOOR HINGES. (CLOSE DOOR TIGHTLY)
- STOVE COLD (NO FIRE)
- EXHAUST DISCONNECTED.
- BURNPOT EMPTY AND CLEAN.
- TURN STOVE TO "ON" POSITION.

YEAR	STOVE	DAMPER CLOSED	DAMPER OPEN
1989	P24I & P24FS	00.10	00.60
1990		00.10	00.60
1991		00.10	00.60
1992		00.72	00.64
1993		00.72	00.64
1994		00.72	00.64
1995		00.72	00.64

DAMPER ON EXHAUST

DAMPER ON INTAKE

1992	P32 & P26	00.66	00.56
1993		00.66	00.56
1994		00.66	00.56
1995		00.66	00.56

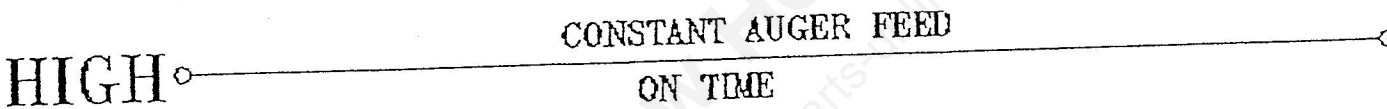
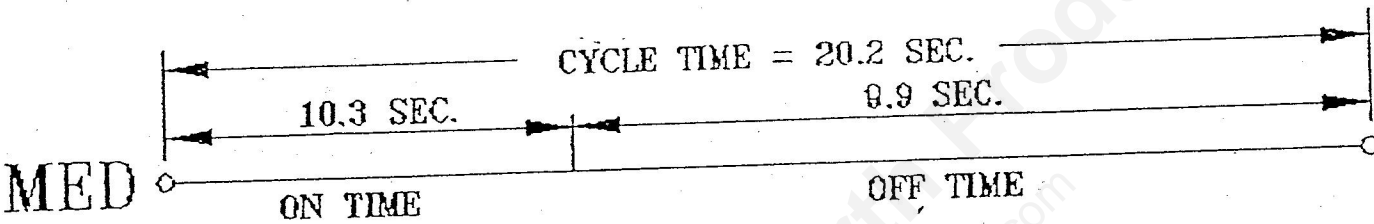
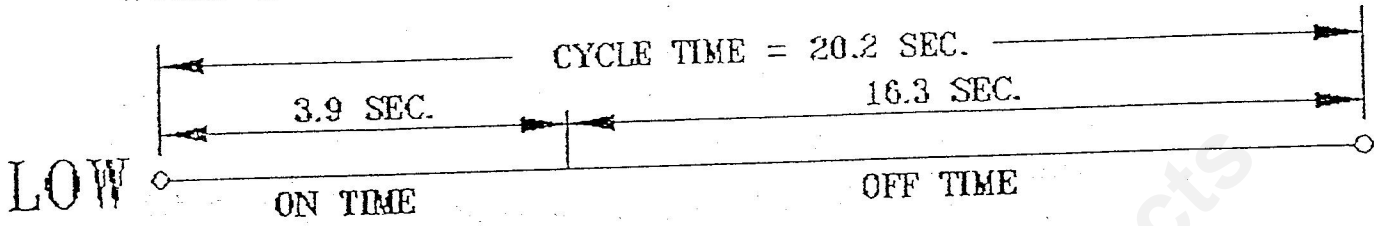
1995	P22	00.62	00.54
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NOTE: BURNING STOVE MAY LOWER DAMPER OPEN READINGS BY 00.10.

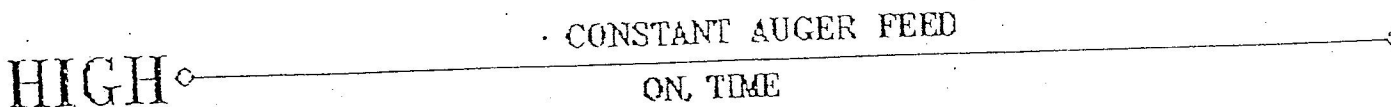
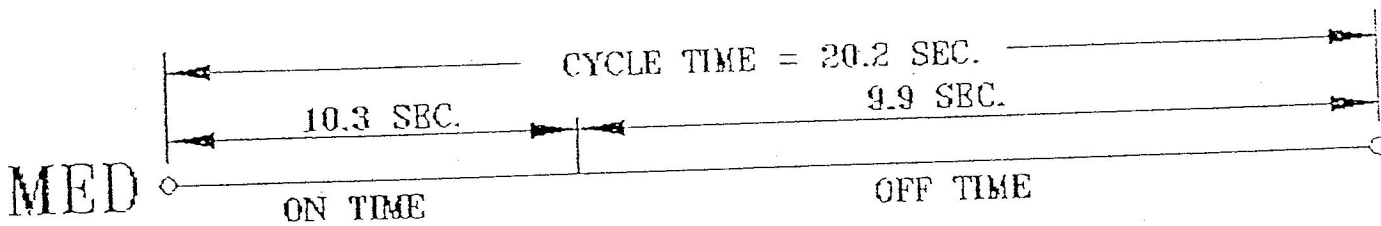
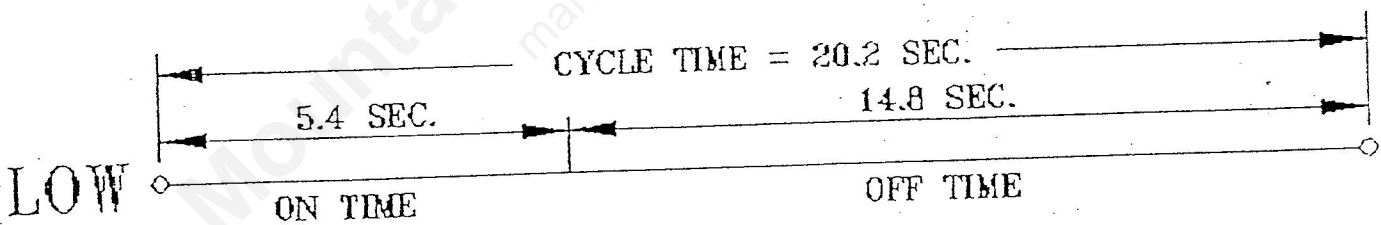
READING MAY BE 00.06 LOWER WITH EACH 1500' IN ELEVATION ABOVE 1500' TO 2000'.

P22 TIMING CYCLES

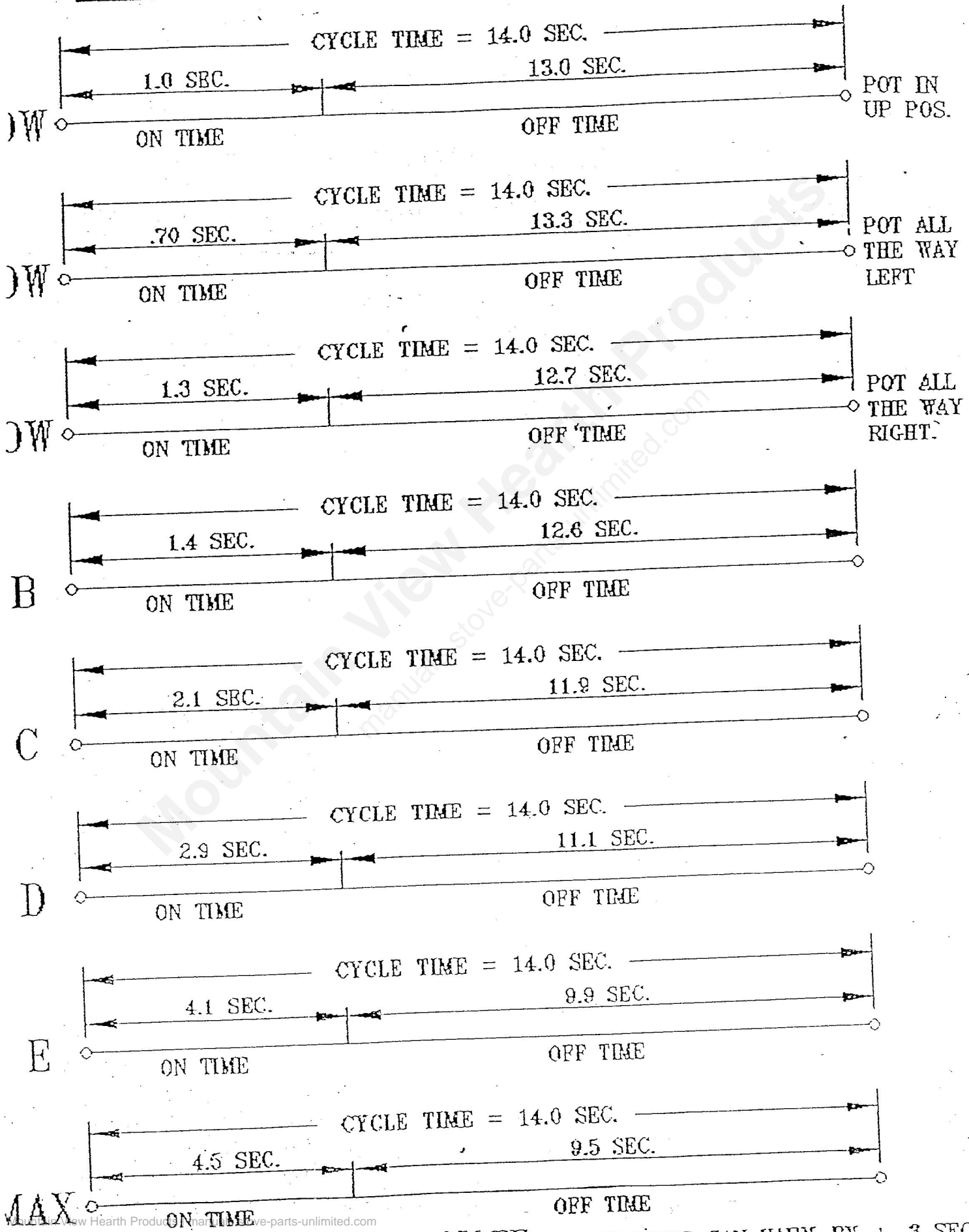
WITH LOW END POT ADJUSTED ALL THE WAY DOWN



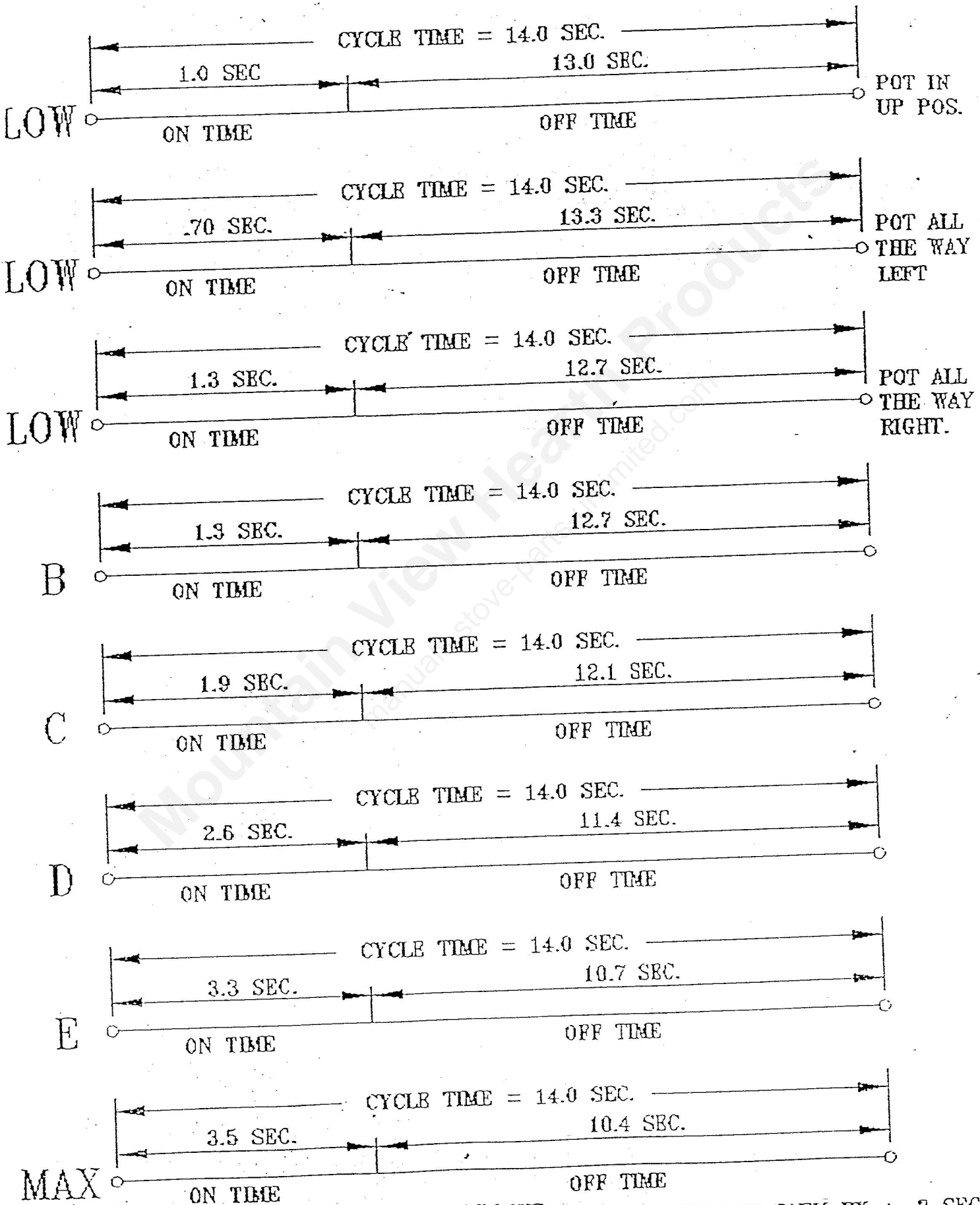
WITH LOW END POT ADJUSTED ALL THE WAY UP



P24 & P26 TIMING CYCLES



P32 TIMING CYCLES

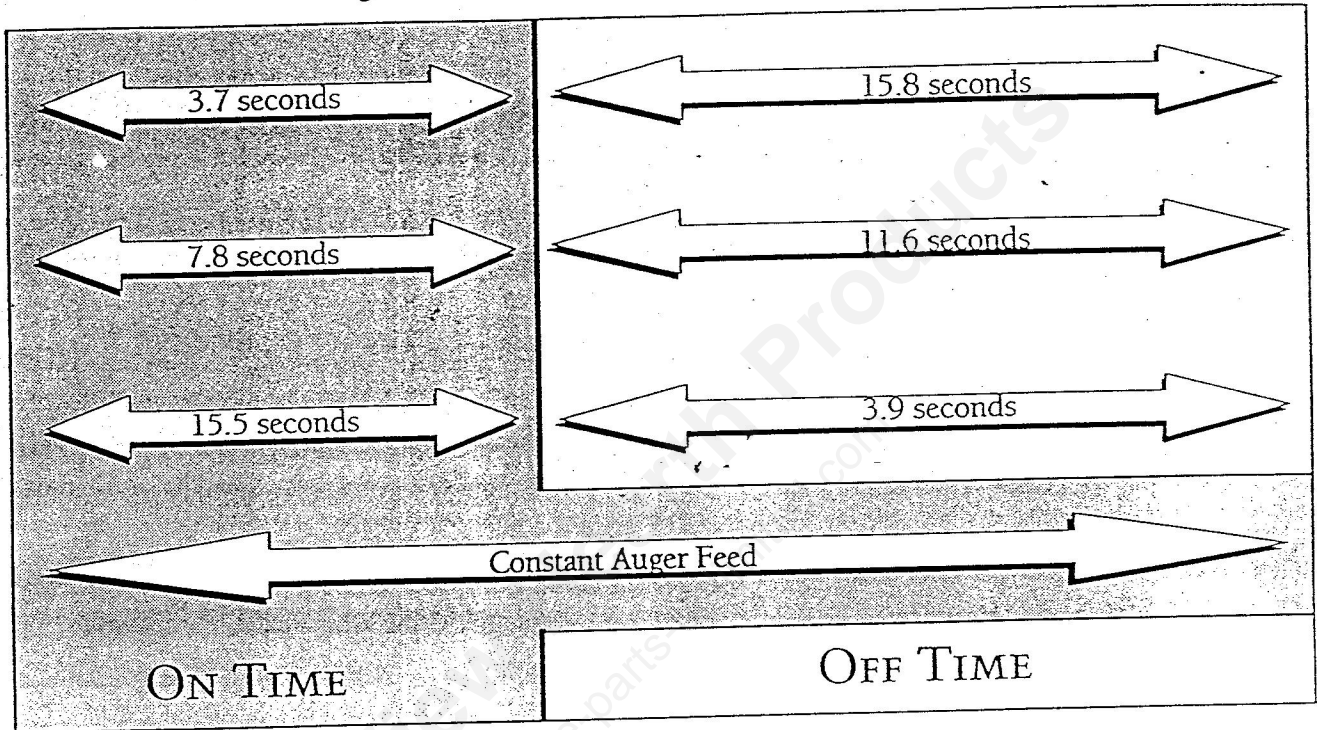


NOTE: THESE TIMES CAN VARY BY \pm .3 SEC.

P22 TIMING CYCLES

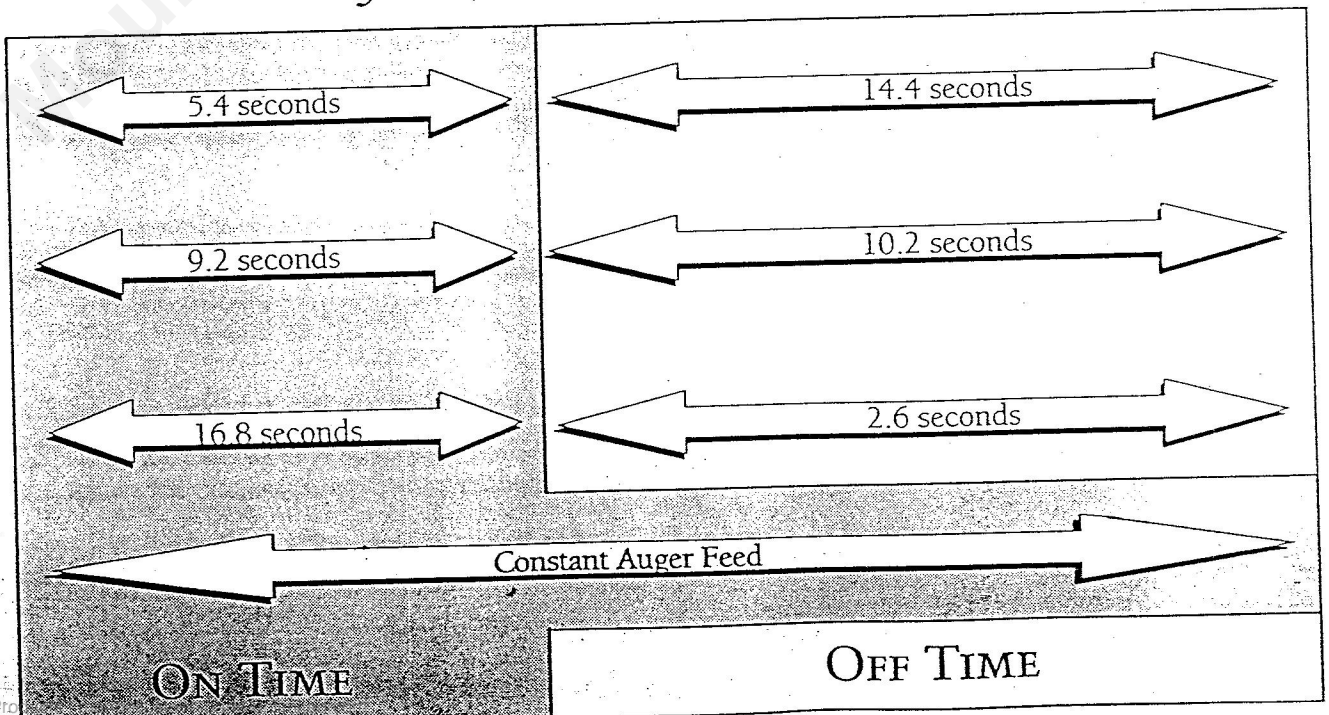
With Low end pot adjusted all the way DOWN

Total Cycle time = 19.5 seconds



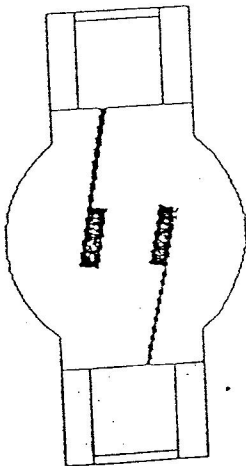
With Low end pot adjusted all the way UP

Total Cycle time = 20.2 seconds



AUGER & BLOWER
THERMODISK

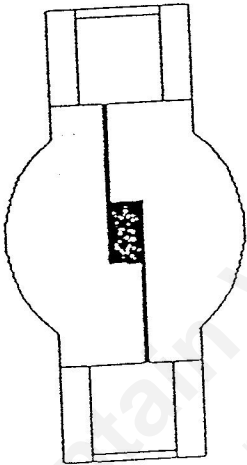
60T22
NORMALLY OPEN



CLOSES WHEN STOVE
TEMPERATURE
REACHES 120 DEG. F.

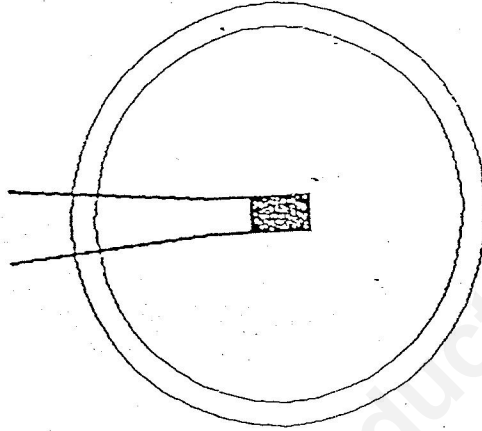
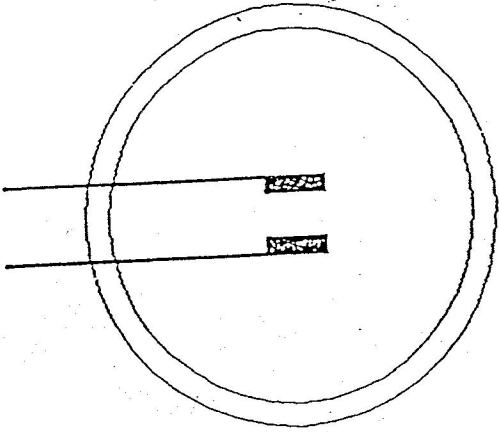
HIGH LIMIT
THERMODISK

60T21
NORMALLY CLOSED



OPENS WHEN STOVE
TEMPERATURE
REACHES 300 DEG. F.

NORMALLY OPEN



CLOSES WHEN STOVE
NEGATIVE PRESSURE
REACHES 0.1" W.C.

National Steelcrafters

OF OREGON, INC.

Pellet Stoves



BRECKWELL

C A D E T

BY BRECKWELL

"HOT ROD" AUTOMATIC FIRE STARTER INSTALLATION INSTRUCTIONS TRADITION SERIES

NOTE: INSTALLATION MUST BE DONE BY AN AUTHORIZED
BRECKWELL DEALER.

1. Unplug Stove.
2. On P24FS remove rear sheet.
3. On the P24I remove the convection blower.
4. Remove the 3/8" hinge pin from the rear of the firestarter housing (1/8" single allen wrench) tube by loosening the set screw on top of the housing tube.
5. Insert **HOT ROD** into rear of firestarter housing tube making sure that back of rod (with wires) is flush with housing back. Secure by tightening set screw. CAUTION! do not over tighten set screw as this may collapse HOT ROD!
6. Making sure that the Molex Connector on the firestarter control board is in the "up" position, very carefully connect the board to the pipe guide bracket by inserting the four (4) standoffs into the holes provided.
7. Connect the wire harness to the control board by plugging the male end of the molex (on harness) into the female end attached to the board.
8. Connect the two red wires to the two HOT ROD wires (either way) with spade connectors.

YOU HAVE NOW COMPLETED THE INSTALLATION OF THE
BRECKWELL "HOT ROD" FIRESTARTER SYSTEM!

BRECKWELL-INSTA-394

National
Steelcrafters

OF OREGON, INC.

Pellet Stoves



BRECKWELL

C A D E T

BY BRECKWELL

"HOT ROD" AUTOMATIC FIRESTARTER OPERATION INSTRUCTIONS

1. Make sure that the fuel hopper is full of pellets and the burn pot is clean.
2. Turn the ON/OFF switch on the stove's control panel to the "ON" position.
3. Prime the auger by depressing the manual feed switch until pellets start to drop.
4. Set the fuel control knob to the "D" setting.
5. Push the damper rod all the way in.
6. Depress the "AUGER" button on the control panel.
7. The fire will start within 4½ to 5 minutes.
8. When the fire is well established pull out the damper ½".
9. Wait 15 minutes and set fuel control and damper to desired setting.

MAINTENANCE INSTRUCTIONS:

Dust or lint could accumulate between the firelighter rod and the firelighter housing over a period of time. To clean pull the burn pot off and vacuum this area once per year.

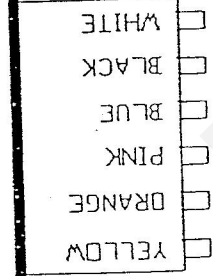
NOTE: IN THE EVENT OF A POWER FAILURE, SHUT THE STOVE TO "OFF" POSITION, WAIT 15 SECONDS AND REPEAT STARTUP PROCEDURE.

breckw\br-instu 494

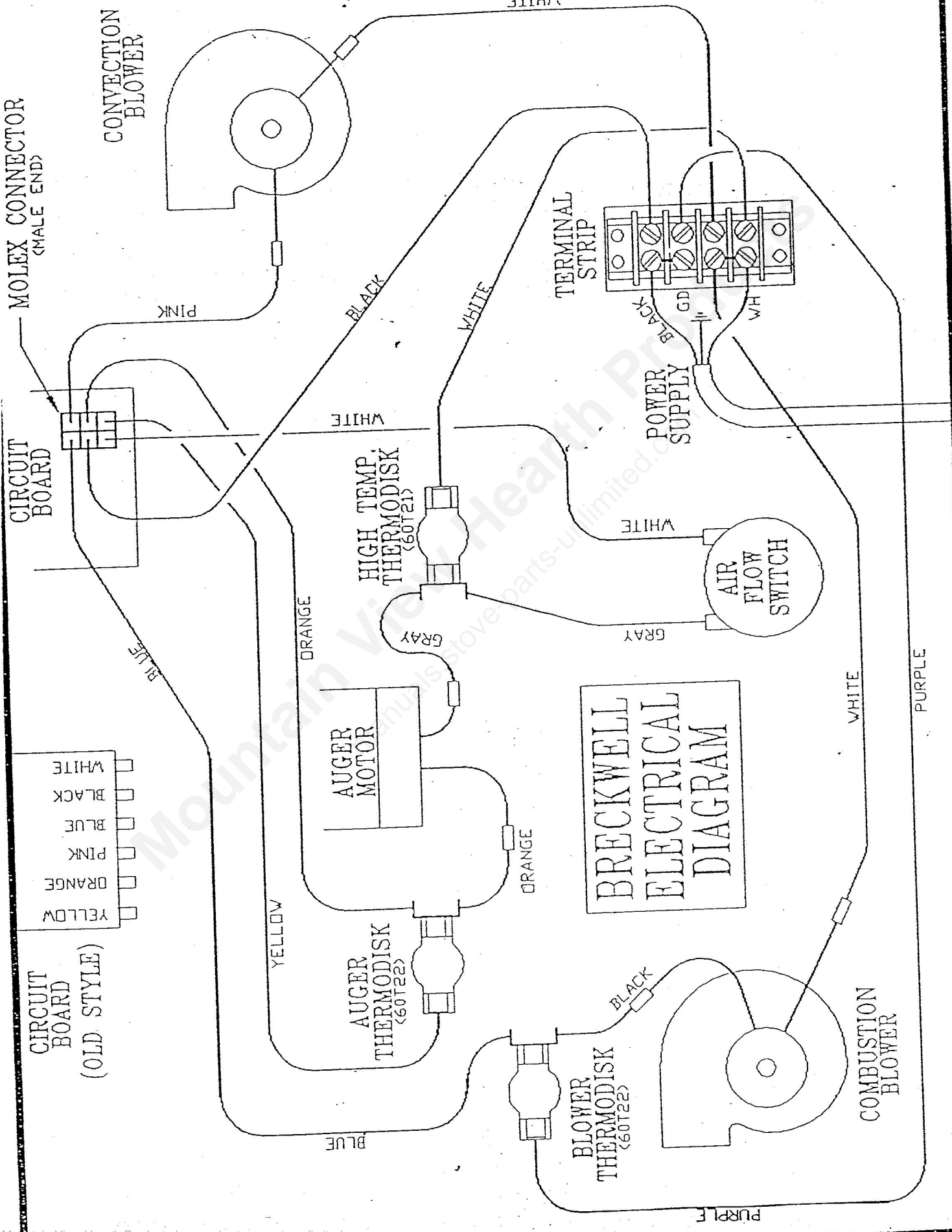
MOLEX CONNECTOR
(MALE END)

CONVECTION
BLOWER

CIRCUIT
BOARD



CIRCUIT
BOARD
(OLD STYLE)



BRECKWELL ELECTRICAL DIAGRAM

National
Steelcrafters

OF OREGON, INC.

Pellet Stoves



BRECKWELL

C A D E T
BY BRECKWELL

"HOT ROD" AUTOMATIC FIRESTARTER OPERATION INSTRUCTIONS

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Dust or lint could accumulate between the firelighter rod and the firelighter housing over a period of time. To clean pull the burn pot off and vacuum this area once per year.

NOTE: IN THE EVENT OF A POWER FAILURE, SHUT THE STOVE TO "OFF" POSITION, WAIT 15 SECONDS AND REPEAT STARTUP PROCEDURE.

breckw/ho-instn 494

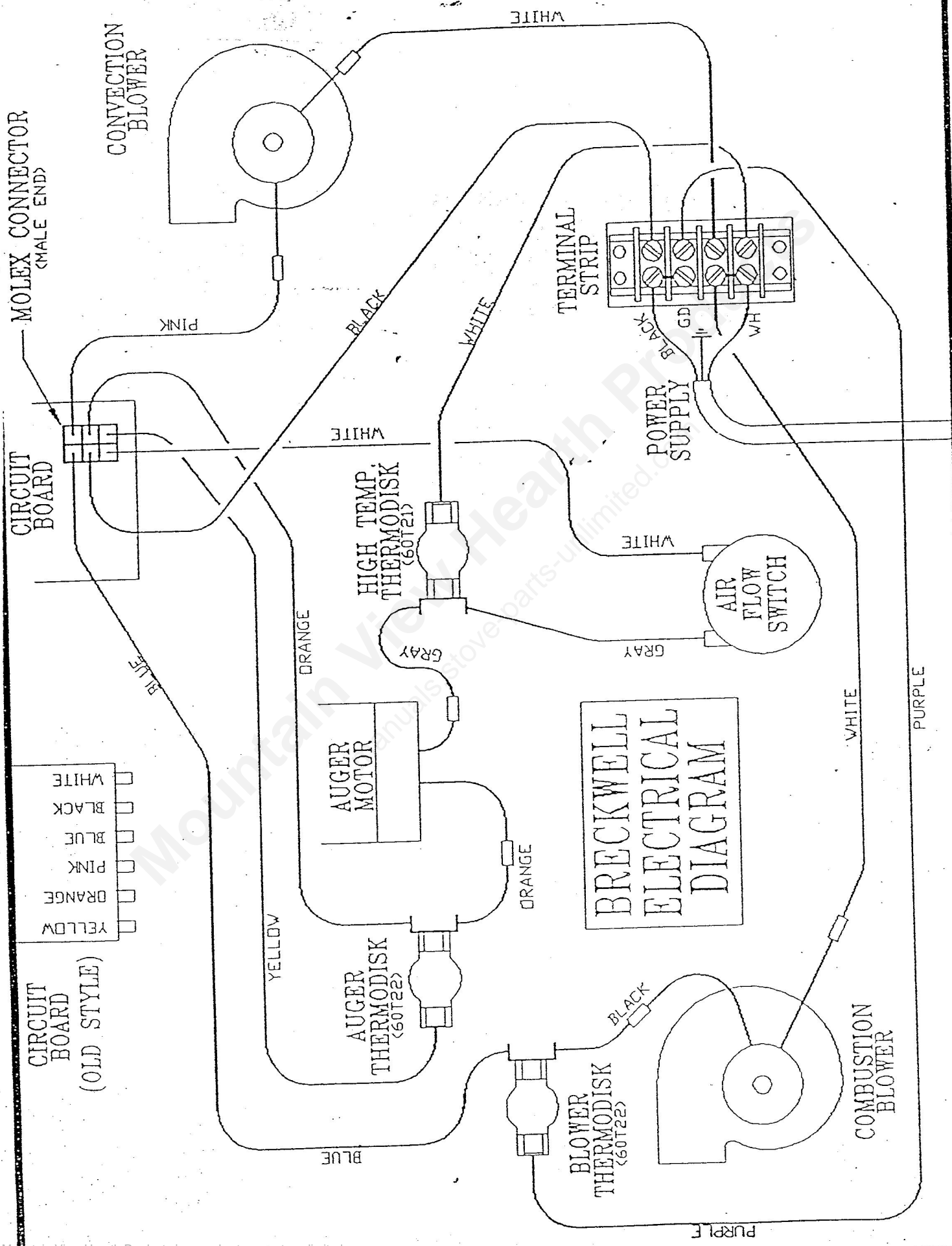
MOLEX CONNECTOR
(MALE END)

CONVECTION
BLOWER

CIRCUIT
BOARD

CIRCUIT
BOARD
(OLD STYLE)

- WHITE
- BLACK
- BLUE
- PINK
- ORANGE
- YELLOW



BRECKWELL ELECTRICAL DIAGRAM

MOLEX CONNECTOR
(MALE END)

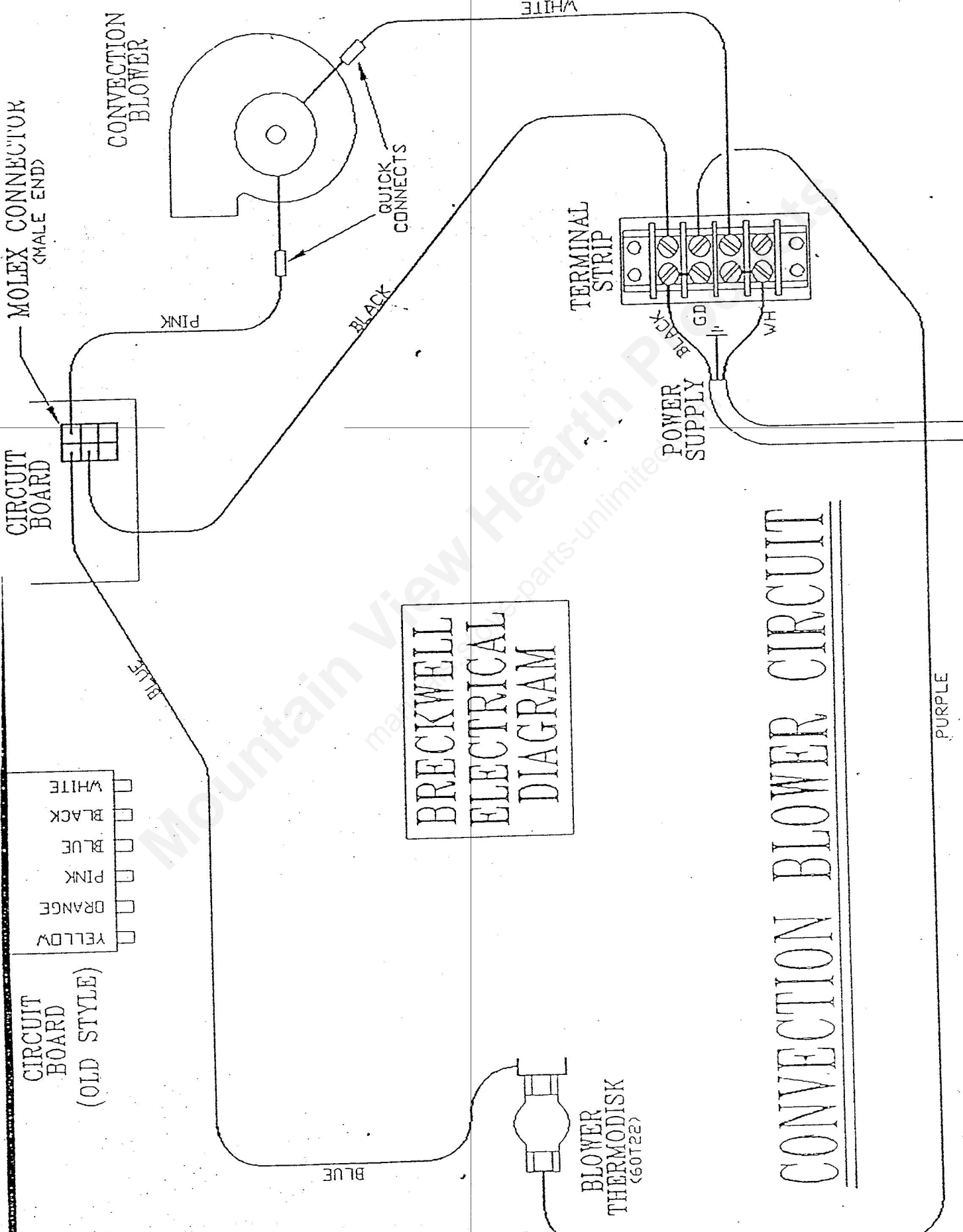
CIRCUIT BOARD

CIRCUIT BOARD
(OLD STYLE)

CONVECTION BLOWER

BRECKWELL ELECTRICAL DIAGRAM

CONVECTION BLOWER CIRCUIT



MOLEX CONNECTOR
(MALE END)

CIRCUIT BOARD

CIRCUIT BOARD
(OLD STYLE)

- WHITE
- BLACK
- BLUE
- PINK
- ORANGE
- YELLOW

BRECKWELL
ELECTRICAL
DIAGRAM

COMBUSTION BLOWER CIRCUIT

TERMINAL STRIP

POWER SUPPLY

QUICK CONNECTS

BLOWER THERMIST (60T22)

COMBUSTION BLOWER

BLUE

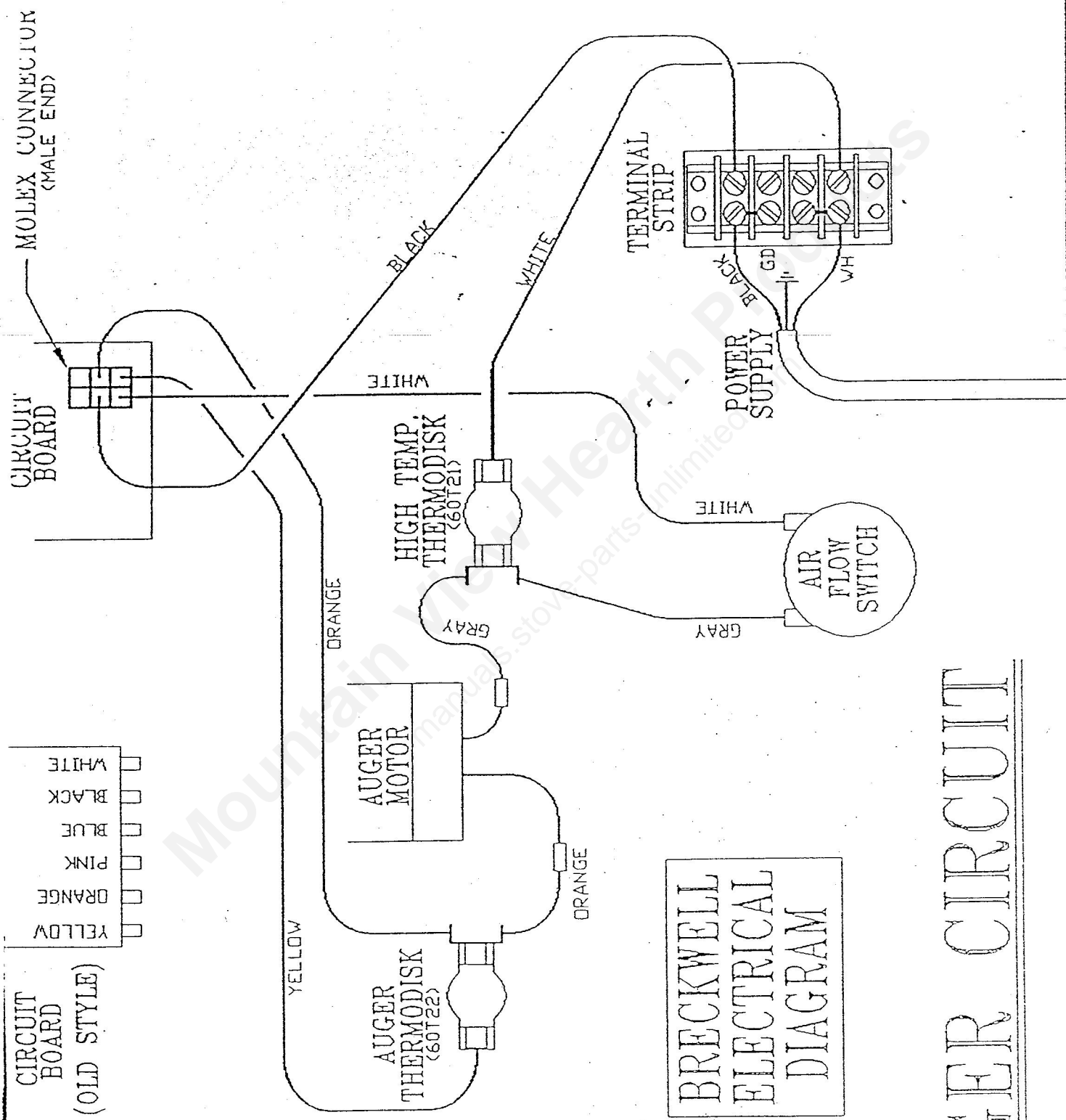
BLACK

BLUE

WHITE

PURPLE

PURPLE



AUGER CIRCUIT