

TRAVIS INDUSTRIES PELLET PRODUCTS



Pellet Stoves & Inserts

Pellet Venting

Pellet Restrictors

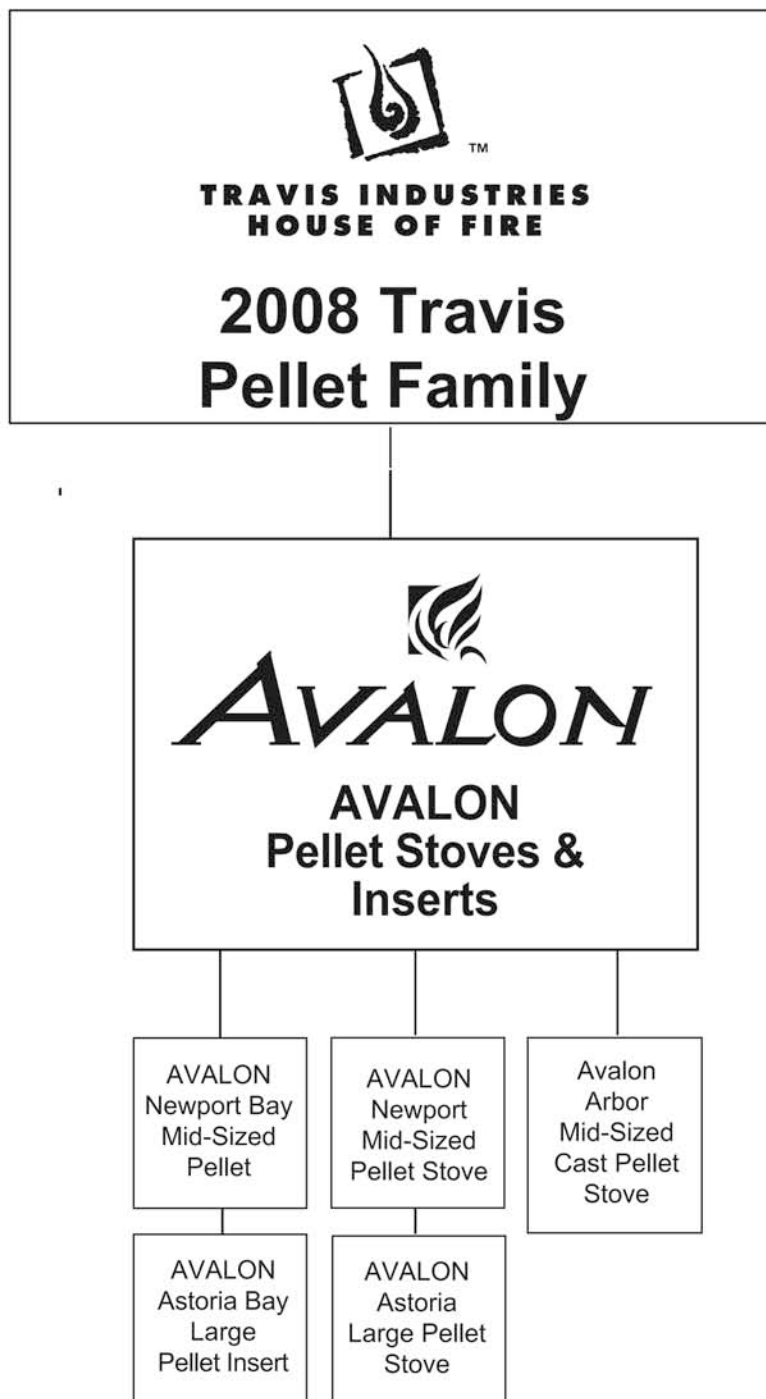
Pellet Maintenance

Wood & Pellet Installation

Wood & Pellet Lab Activities

Installation Lab Activities

TRAVIS INDUSTRIES PELLET PRODUCTS



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AVALON Pellet Stoves & Inserts

Pellet Appliance	Square Feet Heating Space	Burn Rate	BTU's Range	Burn Time	Efficiency	Electrical Usage	Automatic Igniter	Hopper Capacity	Installation Approvals	Venting Size
NEWPORT BAY	800 - 1,600 Sq. Ft	High 3.5 Lbs./Hr. Low 1.2 Lbs./Hr.	Low 9,600 High 28,000	Low 29 Hours High 10 Hours	Up to 82%	400 W - Start Up 180 W - Operation 3.6 AMPS	YES 1,500° F	35 Lbs.	Horizontal & Vertical Class A Retro Masonry ZC Mobile Home	3" 4" at High Elevations or Tall Vertical Terminations
NEWPORT	800 - 1,600 Sq. Ft	High 3.5 Lbs./Hr. Low 1.2 Lbs./Hr.	Low 9,600 High 28,000	Low 50 Hours High 15 Hours	Up to 82%	400 W - Start Up 180 W - Operation 3.6 AMPS	YES 1,500° F	55 Lbs.	Horizontal & Vertical Class A Retro Mobile Home	3" 4" at High Elevations or Tall Vertical Terminations
ASTORIA	800 - 2,250 Sq. Ft	High 5.5 Lbs./Hr. Low 1.7 Lbs./Hr.	Low 13,940 High 45,100	Low 67 Hours High 21 Hours	Up to 82%	400 W - Start Up 180 W - Operation 3.6 AMPS	YES 1,500° F	115 Lbs.	Horizontal & Vertical Class A Retro Mobile Home	4"
ASTORIA BAY	800 - 2,250 Sq. Ft	High 5.5 Lbs./Hr. Low 1.7 Lbs./Hr.	Low 13,940 High 45,100	Low 32 Hours High 10 Hours	Up to 82%	400 W - Start Up 180 W - Operation 3.6 AMPS	YES 1,500° F	55 Lbs.	Horizontal & Vertical Class A Retro Mobile Home	4"
ARBOR	800 - 2,250 Sq. Ft	High 5.5 Lbs./Hr. Low 1.7 Lbs./Hr.	Low 13,940 High 45,100	Low 47 Hours High 15 Hours	Up to 82%	400 W - Start Up 180 W - Operation 3.6 AMPS	YES 1,500° F	47 Lbs.	Horizontal & Vertical Class A Retro Mobile Home	4"

TRAVIS INDUSTRIES PELLET PRODUCTS



AVALON Pellet Stoves & Inserts

Model	Glass Viewing Area	Heat Exchanger Tubes	Restrictor	Manual Operation	Wall Thermostat Operation	Remote Operation	Convection Blower	Exhaust Blower	3/16" 309 Stainless Steel Burn Pot	Options
NEWPORT BAY	167 Sq. In.	6	Intake Air	YES	YES Optional	YES	Cross Flow Transaxial 130 CFM	Centrifugal 75 CFM	YES	Gold or Nickel Door, Gold Convection Grill, Log Set
NEWPORT	167 Sq. In.	6	Intake Air	YES	YES Optional	YES	Cross Flow Transaxial 130 CFM	Centrifugal 75 CFM	YES	Gold or Nickel Door, Gold Convection Grill, Log Set
ASTORIA	321 Sq. In.	10	Intake Air & Exhaust	YES	YES Standard with Astoria	YES	Centrifugal 165 CFM	Centrifugal 92 CFM	YES Curved Bottom Wide Flame Dispersal	Gold or Nickel Door & Convection Grill, Universal Log with Modified Holder
ASTORIA Bay	321 Sq. In.	12	Intake Air & Exhaust	YES	YES Standard with Astoria	YES	Centrifugal 165 CFM	Centrifugal 92 CFM	YES Curved Bottom Wide Flame Dispersal	Gold or Nickel Door & Convection Grill, Universal Log with Modified Holder
ARBOR	308 Sq. In.	12	Intake Air and Exhaust	YES	YES Standard	YES	Centrifugal 165 CFM	Centrifugal 92 CFM	YES Curved Bottom for Wide Flame Dispersal	Universal Log with Modified Holder

TRAVIS INDUSTRIES PELLET PRODUCTS



Features of Travis Brand Pellet Stoves and Inserts

- Small and Large Heating Capacities
- 800 to 1,600 Sq. Ft. Heating Capacity
- Large Hopper Capacity
- Gravity Flow Feed
- Heavy-Duty Auger Shaft and Flight
- Removable Auger Cover
- Self-Lubricating Bronze Auger Bearings
- Heavy-Duty Auger Motor
- Heat Exchanger Ash Rake Cleaner
- No Tools Requires for Cleaning
- 3/16" Stainless Steel Firepot
- Cast Iron Fireback
- Air Tight Door Seal
- Airwash Keeps Glass Clear
- Options of Black, Gold Door & Nickel Door - Avalon
Pewter Door - Lopi
- Operation Instructions on Inside of Lid
- "Real World" Seven Year Warranty
- Horizontal or Vertical Termination Flue Options
- Outside Air kit
- Minimal Clearances to Combustibles
- Minimal Floor Protection Requirements
- Easy Access Components
- Fuse Protected Systems
- Inserts Masonry and ZC Approved
- Adjustable Door
- Spring Loaded Rails on Ash Dump
- Hopper Safety Snap Disc
- Flow Safety Snap Disk
- Quiet Operation
- Automatic ignition
- Thermostat/Remote Control Option
- Auto or Manual Operation Option
- Single Control Feed/Air Control

TRAVIS INDUSTRIES PELLET PRODUCTS



Features of Avalon Arbor Cast Iron Pellet Stove



Features:

- Medium-size pellet stove.
- Black painted cast iron design of the wood burning Leyden
- Organic tree cast iron detail.
- Cast double doors with large fireview.
- Ash Glide Ash Pan:
 - Most convenient ash removal system on the market, no special tool needed.
 - Large ash holding capacity.
- Uses a 4" chimney.
- EPA Exempt.
- Uses same pellet components found in the Yankee pellet stove.
- Will have same performance statistics as the Astoria.
- 47 lbs. hopper.
- Unique burn pot designed to burn wood pellets or a 50/50 mix of wood pellets and corn.
- Most efficient heat exchange system of any Avalon pellet stove.
- Self-starting ignitor standard.
- Whisper quiet performance - variable combustion fan synchronized with adjustable burn rate.
- Wall thermostat standard.
- Stay clean airwash.
- Stainless-steel burn pot removes easily for cleaning.
- Electronic control board for manual or automatic operation with use of low voltage thermostat or programmable wall thermostat or remote control.

TRAVIS INDUSTRIES PELLET PRODUCTS



Pellet Appliance Components

When designing pellet appliances the following considerations need to take place.

Safety - The appliance must be designed to contain fire and keep the fuel in the pellet hopper from catching on fire.

Efficiency - Today's heating costs push the public to demand efficient economical appliance operation.

Styling - Appliance appearance and customer choice are an important consideration of the appliance purchase.

Quality - Today's consumer expects top quality for many years of operation.

Easy to operate - Consumers want simple easy-to-operate (consumer friendly) appliances.

Easy to service and maintain - Consumers and service people demand simple easy serviceability.

Quiet operation - A pellet appliance has the potential of being very noisy. Two blowers, auger motor, auger flight and dropping pellets can be very distracting. Therefore, dampening vibration devices have to be incorporated into the appliance design.

Pellet Appliance Components

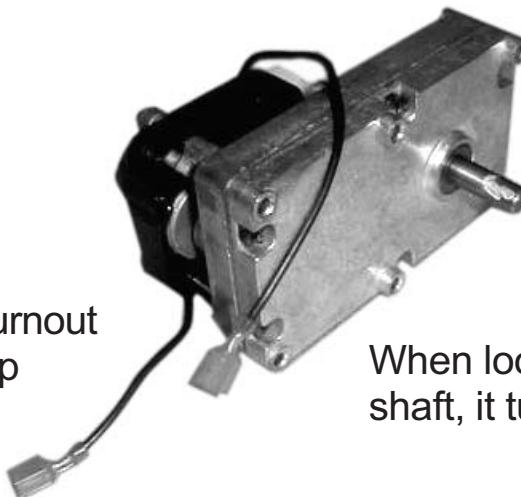
- Pellet Hopper
 - Angled to ensure non-bridging gravity feed
 - Aluminized steel construction
 - Large capacities



- Auger
 - 3/4" steel shaft
 - 1 1/4" pitch spacing (small stoves)
 - 2" pitch spacing (large stoves)
 - Easy, removable access cover
 - Sintered bronze bearings



- Auger Motor
 - Merkl Korff motor
 - Turns at 1 RPM
 - Impedance protected to prevent burnout if the auger freezes up
 - Rubber stops for quiet operation



When looking at output shaft, it turns clockwise

10

Pellet Appliance Components

• Convection Blower



Small Pellet Stoves

- 130 CFM
- Cross flow transaxial blower
- Cushion mounting vibration control



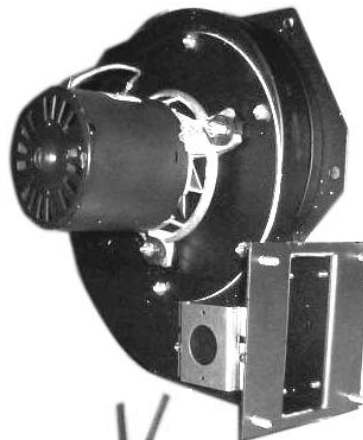
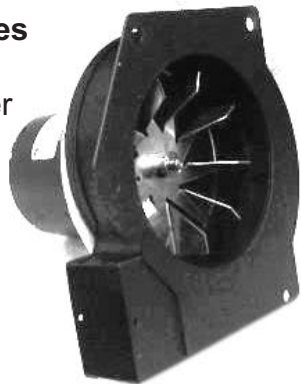
Large Pellet Stoves

- 165 CFM
- Centrifugal blower
- Cushion mounting for vibration control

• Exhaust Blower

Small Pellet Stoves

- 75 CFM
- Centrifugal blower
- Cushion mounting for vibration control

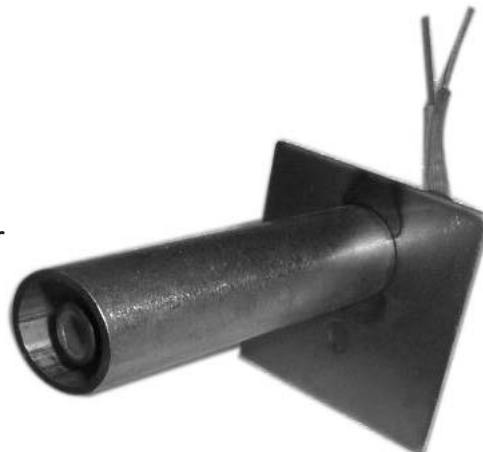


Large Pellet Stoves

- 92 CFM
- Centrifugal blower
- Cushion mounting for vibration control

• Igniter

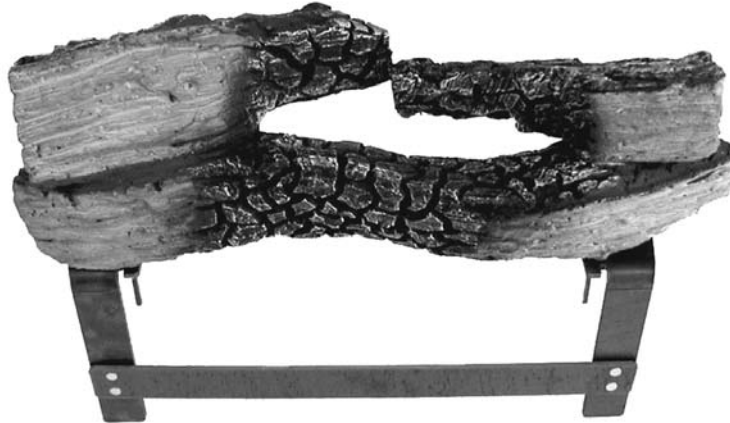
- 110 volt
- Heats to 1500° F
- Sheath on large stoves 1/2" longer



Pellet Appliance Components

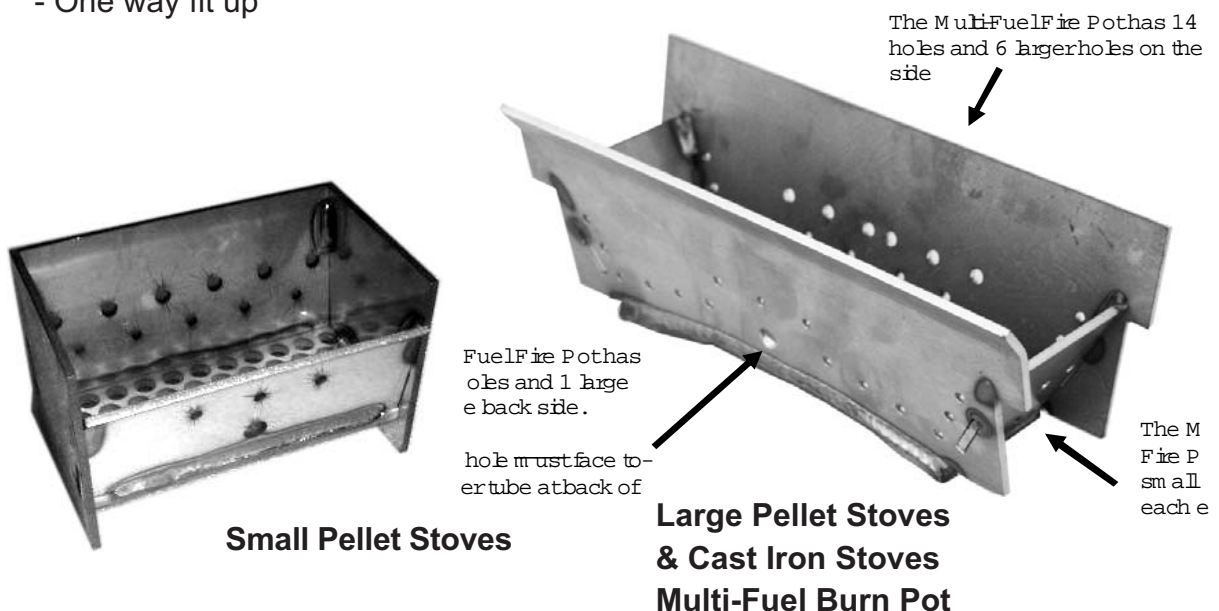
• Log Set

- Optional universal cast log
- Large stoves use a modified holder



• Burn Pot

- Stainless steel burn pot
- Bottom 3/16" - Type 309 Stainless Steel
- Large burn pot features arched bottom
- Easily removed for maintenance
- One way fit up



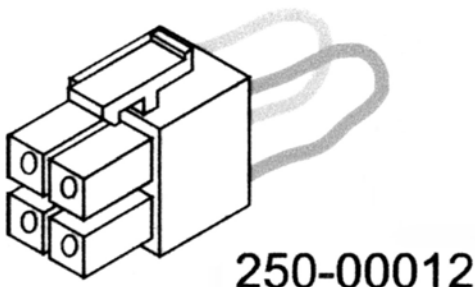
Configuring the Control Board

Overview

The new AVR control board is the next generation control board that is compatible with all pellet stoves and inserts, large and small manufactured from 1997 to today. Circuitry on the board allows it to be programmed for either the large or small pellet heaters (these heaters use different voltage settings). See “” for details. It also includes a diagnostic feature that allows a service person to diagnose a fault without having to inspect the wiring or components. The indicator lights on the control board will display a fault code after a fault has been detected. This allows the service person to determine which component caused the fault. See “Diagnostic Codes” for details. NOTE: the new wiring harness (250-00017) is required to utilize this feature.

Configuring for Large or Small Heaters

The control board is initially configured for the large heaters (Astoria and Yankee models). To change the configuration the control board must be in the off position plugged into a cold stove, (no lights or running components) with the jumper molex removed (see the illustration below). In this condition press and hold the manual auger button down and press both fan up and fan down arrow keys at the same time. All heat output lights will flash. One flash denotes the large pellet heater configuration. Two flashes denote the small pellet heater configuration (Newport and Pioneer models). Repeat pressing the keys until the correct configuration is obtained.



Configuring the Control Board

Using this Control Board with Older Wiring Harnesses

When the control board is installed on an older wire harness the 4 pin molex jumper plug on the back of the control board next to the stock wire harness must be installed. This jumper replaces the diagnostic wires (see “”) that are present on the new wiring harness. The control board will work normally, but the diagnostic capabilities will not function.

Technical Notes for Operation

The new pellet control board is essentially the same as our old board. The biggest difference between them is that buttons were used in place of knobs on the heat and fan controls.

Make sure to give the home owner the “Pellet Heater Operating Instructions” if you are replacing an older board (the final 4 pages of this instruction sheet). It contains the new operating instructions for this control board.

A few changes were made to accommodate the new control board. The start up cycle indicator on the old board illuminates all heat output indicator lights to show the unit is in a start-up cycle and adjusting the heat setting knob would not change them. On the new board to enable adjusting the run settings during start-up we made the start-up indicator the blinking #1 heat output light. If the #1 heat output light is blinking the board is in a start-up mode and the blower and auger outputs can not be adjusted. The run settings the unit will go to after start-up are displayed on the heat output indicator. These settings can be adjusted any time during start up by pushing the up or down heat buttons on the panel. When the fan setting is adjusted up or down the heat output indicators will turn off and the fan setting will display.

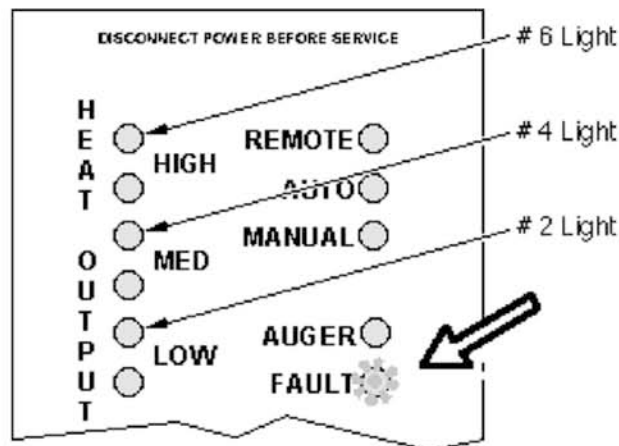
Another feature we added to the control board is a manual auger feed. This button can be used to prime and empty the auger or speed the initial delivery of pellets to the burn pot. All start-up timing remains the same and the stove will still self prime the auger tube – this option allows the operator an additional option. It is not needed for normal operation.

All voltage outputs and feed rates remain the same as the old board. There is a difference in respect to the auger on/off times. The auger timing was changed to shorten the interval between pellet drops to the burn pot. For example, on low the auger used to turn for 3 seconds and remain off for 13 seconds, for this same condition this control board turns the auger for 2.5 seconds and remains off for 10.7 seconds. This produces the same amount of time the auger is turning and not turning but gives a steadier flame height and less incidental outages on low.

Configuring the Control Board

Diagnostic Codes (Qualified Service Personnel Only)

- Fault and #2 (LOW) Light Flash = Flow Switch Fault
- Fault and # 4 (MED) Light Flash = System Snap Disk Fault (pellets run out & stove goes cold)
- Fault and # 6 (HIGH) Light Flash = Safety or Hopper Snap Disk Fault



Flow Switch Fault

Fault light and #2 heat indicator blinking.

This fault code indicates pressure/flow switch opened or broke its electrical connection during operation.

Likely causes:

- Pinched, cracked or broken pressure tubing.
- Plugged tubing nipple on blower housing.
- Heavy ash build up in the exhaust fan housing,
- Faulty wiring, bad or broken connection of flow switch gray wires.
- Weak or bad combustion blower
- Faulty pressure switch.

Configuring the Control Board

Diagnostic Codes (Qualified Service Personnel Only) - Continued

System Snap Disk Fault

Fault light and #4 heat indicator blinking.

This fault code is caused by a heat sensitive switch that tells the control board if the appliance is hot or cold. During operation if the unit runs out of pellets or loses its fire this switch will communicate to the control board that the stove is getting cold. The control board will shut off the auger functions and initiate a twenty minute combustion fan safety cool down. Another condition that will trigger this fault code is a failed start. When the appliance is started the control board initiates a 30 minute timer, if the appliance is cold at the end of this 30 minute start up timer the control board will indicate a #4 fault and initiate a 20 minute combustion fan cool down.

Likely causes:

- Unit ran out of pellets.
- Fire went out during operation.
- Unit was cold at the end of a start cycle (fire did not light).
- Faulty snap disk.

Configuring the Control Board

Diagnostic Codes (Qualified Service Personnel Only) - Continued

Safety or Hopper Snap Disk Fault

Fault light and #6 heat indicator blinking.

This fault code is caused by the safety or hopper snap disk registering an over-heated appliance during operation. The control board then shuts down the auger and the convection and combustion blower will run at maximum output for a 40 minute safety cool down cycle. The only way to stop this cool down is to unplug the appliance to reset the control board.

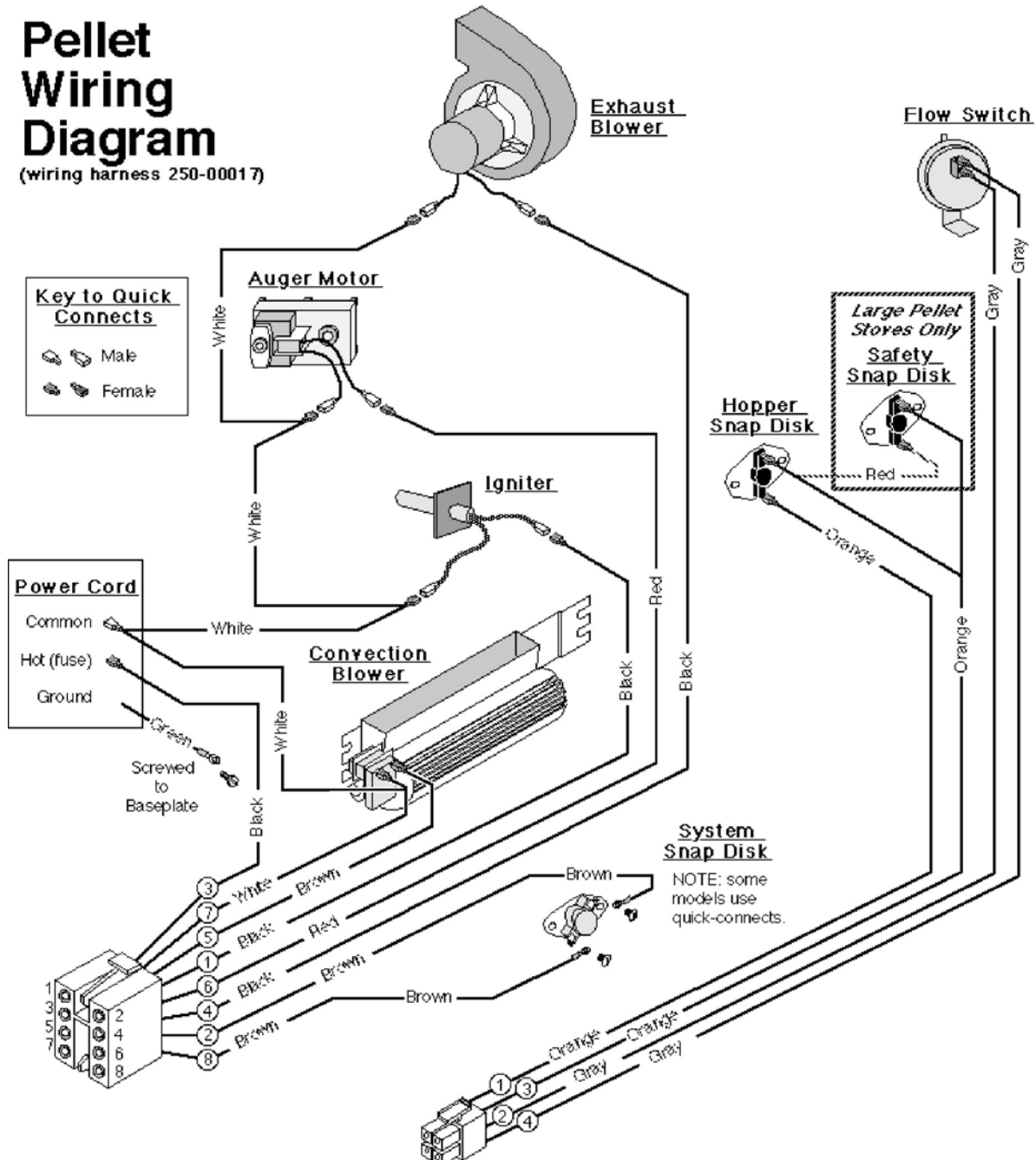
Likely causes:

- Faulty snap disk
- Corroded, loose or broken Snap Disk wiring.
- Failed, plugged or blocked convection blower.
- Reduced air flow into the motor compartment such as blocked air vents on panels or doors.
- Missing refractory.
- Improper fuel type.
- Unauthorized parts used in the pellet feed system.

Wiring Diagram (New, 2005 Version - 250-00017)

Pellet Wiring Diagram

(wiring harness 250-00017)

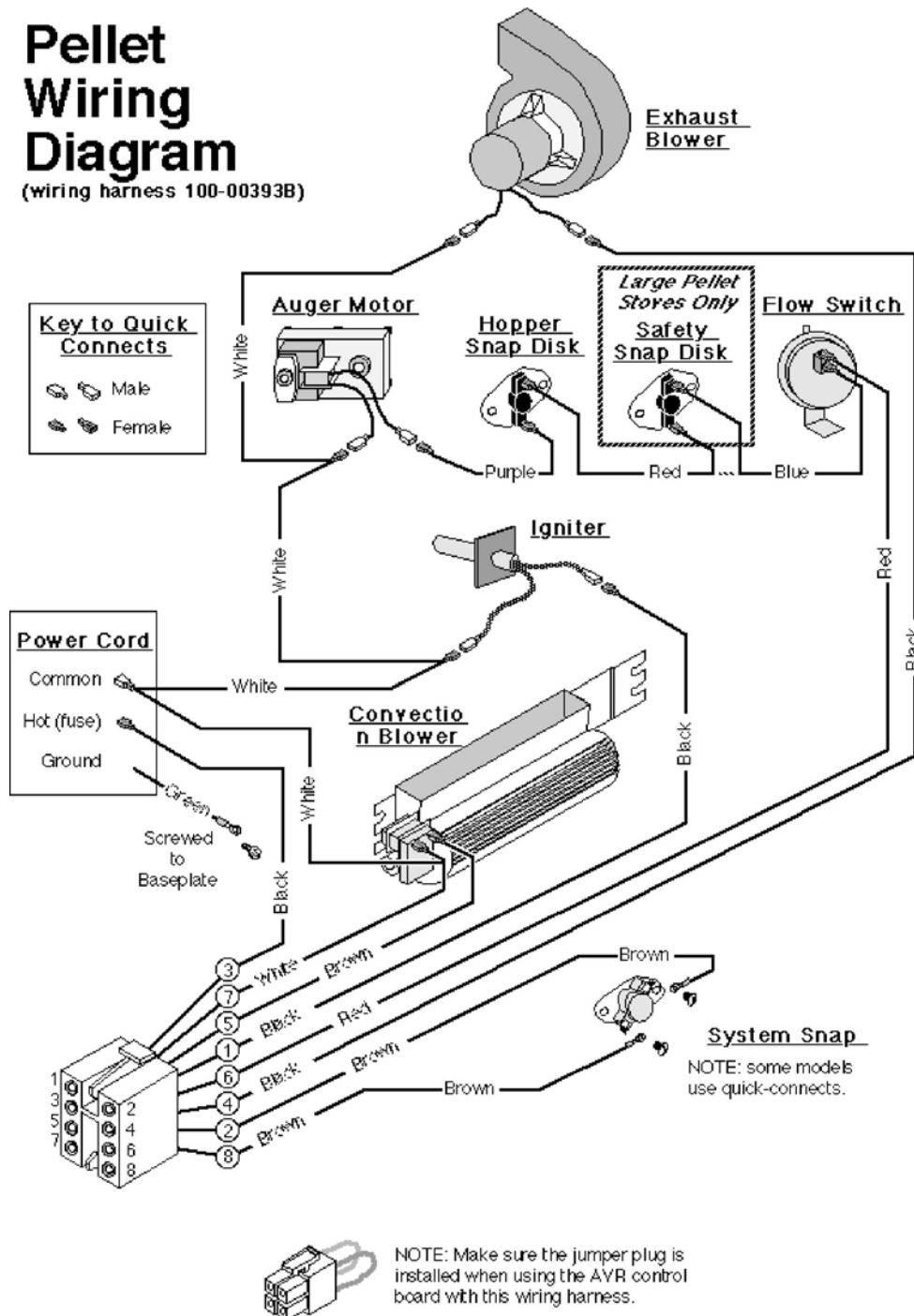


Wiring Diagram (Old Version - 100-00393B)

NOTE: Wire coloring may not be identical to this diagram

Pellet Wiring Diagram

(wiring harness 100-00393B)



Control Board Operation

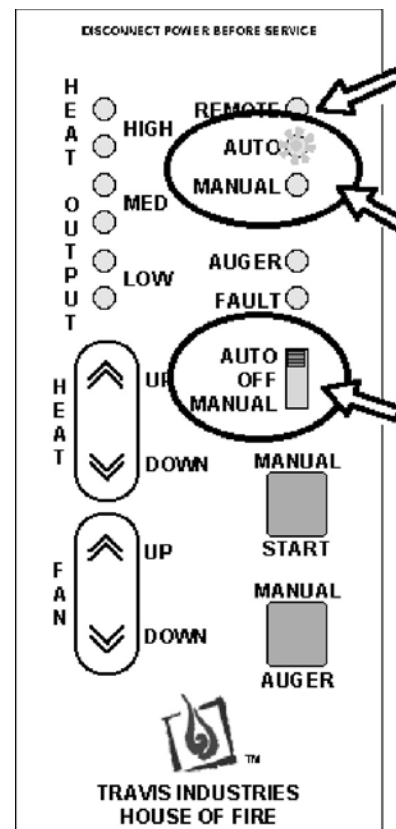
The Two Modes of Operation:

Manual

Manual mode requires the user to turn the heater on and off manually.

Auto (requires a thermostat)

Auto mode allows you to use a thermostat to control room temperature. The stove automatically turns on when the temperature drops below the thermostat setting. Once the stove reaches operating temperature, the stove then turns off at the heat output setting selected.



NOTE: If using a modulating remote, this light will come on to indicate the remote is controlling the heater.

These indicator lights are used to determine which mode you are in.

Use the mode switch to determine the mode.

Switching

Modes While in Operation

Whenever the stove is switched from one mode to another while in operation, the stove will enter the "start-up" sequence for a minimum of 20 minutes.

Control Board Operation

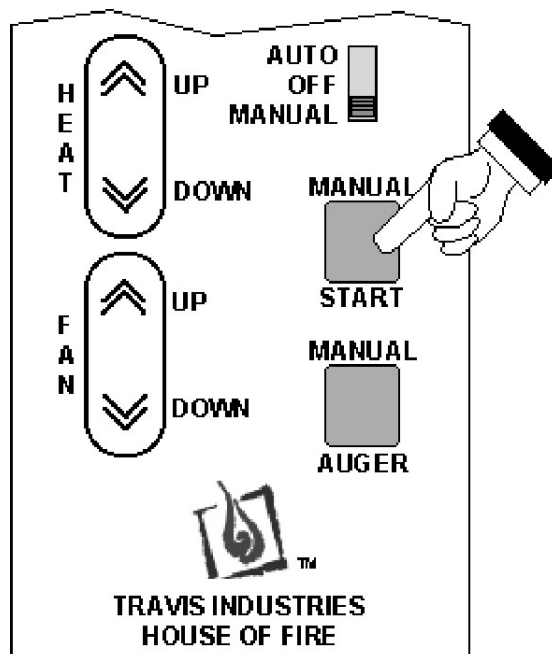
Manual Mode

Manual mode requires the user to turn the heater on and off manually.

To Start

Press the "Manual Start" button. That's it. The stove automatically goes to a medium burn rate and high fan while the igniter starts the fire burning within 10 minutes. During this period the lowest "HEAT OUTPUT" light will flash. If the stove does not start in 30 minutes, the stove turns off.

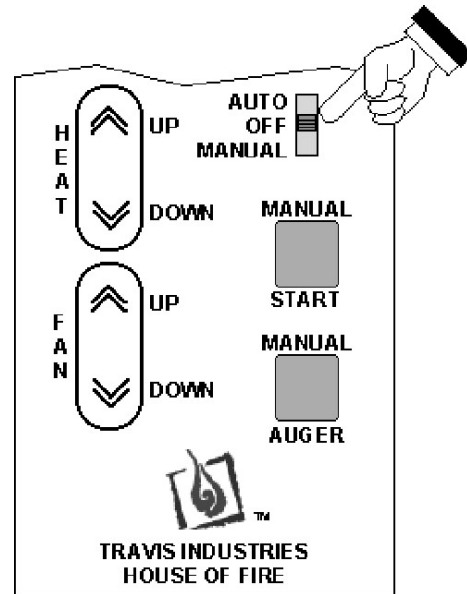
Once up to temperature, the stove will then run at the heat output setting selected on the control panel (see "To Adjust the Heat" below).



Control Board Operation

To Shut Down

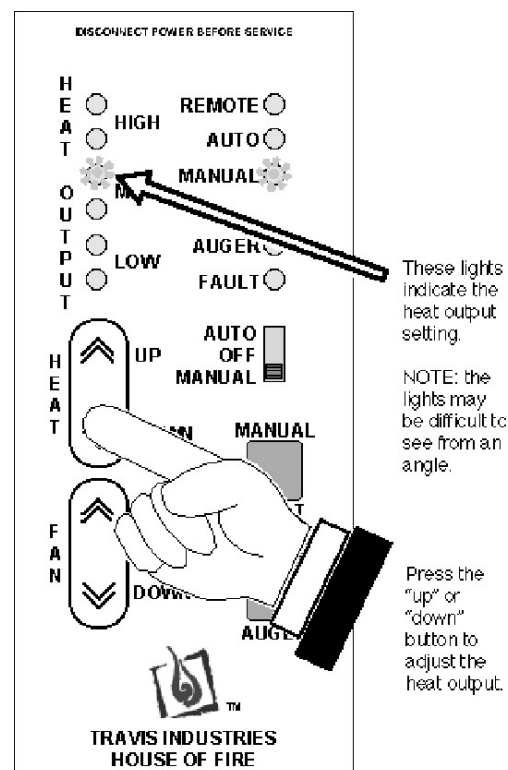
Move the mode switch to "OFF". The exhaust blower will still run until the heater cools down.



To Adjust the Heat

Press the "Heat" buttons to adjust the heat output.

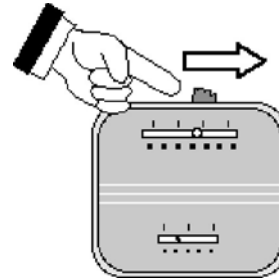
NOTE: During start-up you may adjust the heat setting. This heat setting will take affect once the start-up sequence is complete.



Control Board Operation

Auto Mode

Auto mode allows you to use a thermostat to control room temperature. The stove automatically turns on when the temperature drops below the thermostat setting. Once the stove reaches operating temperature, the stove then runs at the heat output setting selected.



To Adjust Room Temperature (or Start the Stove)

Move the thermostat to the heat setting desired. If the room is cooler than the setting, the stove will go through the start-up sequence for approximately 10 minutes. During this period the lowest "HEAT OUTPUT" light will flash. Once up to temperature, the stove will then run at the heat output setting selected on the control panel. If the room is too hot, move the thermostat to a lesser setting.

To Adjust the Heat

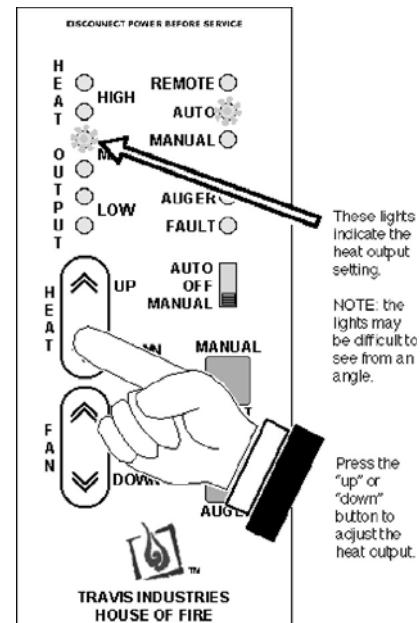
Press the "Heat" buttons to adjust the heat output.

HINT:

If you find that the stove turns on and off repeatedly, you may wish to turn the heat output to a lesser setting. The lower setting will provide a more consistent heat output over time, eliminating the need for the thermostat to repeatedly turn the stove off.

NOTE:

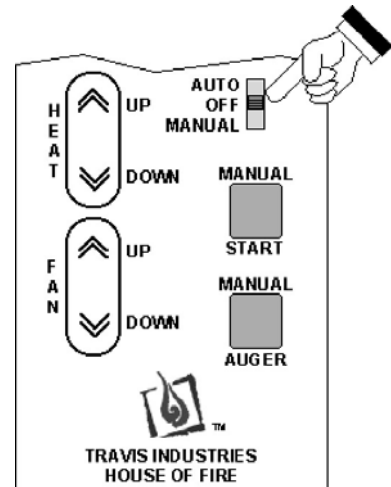
If the thermostat calls for heat while the stove is still cooling down, the stove will go through the start-up sequence (for a minimum of 20 minutes).



Control Board Operation

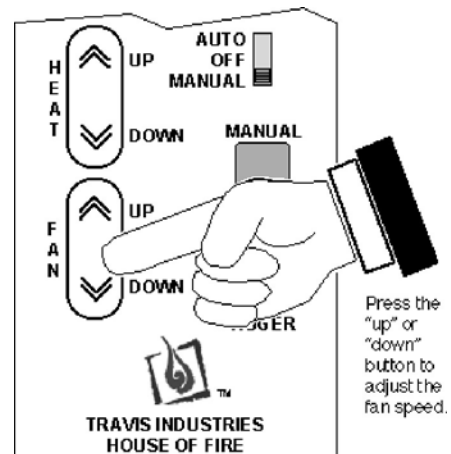
To Shut Down

Move the mode switch to "OFF". The exhaust blower will still run until the heater cools down.



Adjusting the Fan Speed

NOTE: When you press the Fan speed buttons the "Heat Output" lights will indicate fan speed (not "Heat Output"). After a few seconds the "Heat Output" lights will go back to displaying the heat output setting.

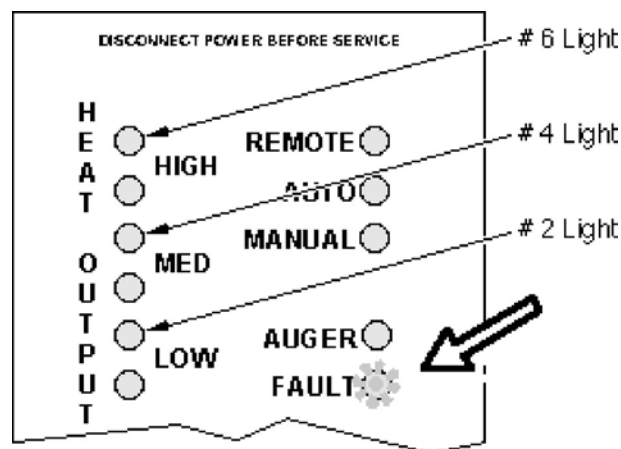


Control Board Operation

"FAULT" Light

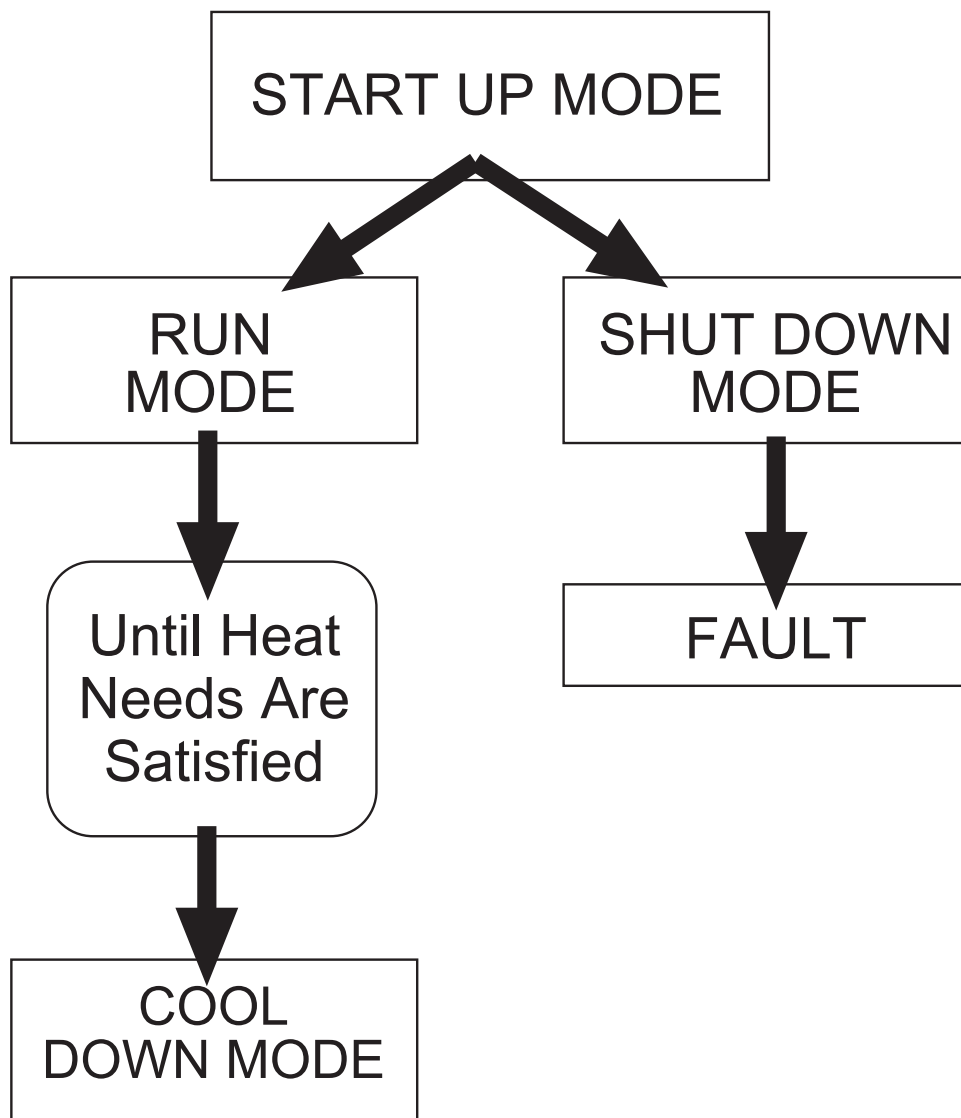
This light comes on when an error occurs:

- The stove runs out of pellets
- During initial start-up (for a split second) or for improper electrical frequency
- A start-up sequence that does not result in the heater coming up to temperature
- To reset the fault light, turn the mode switch to off and re-start the stove.

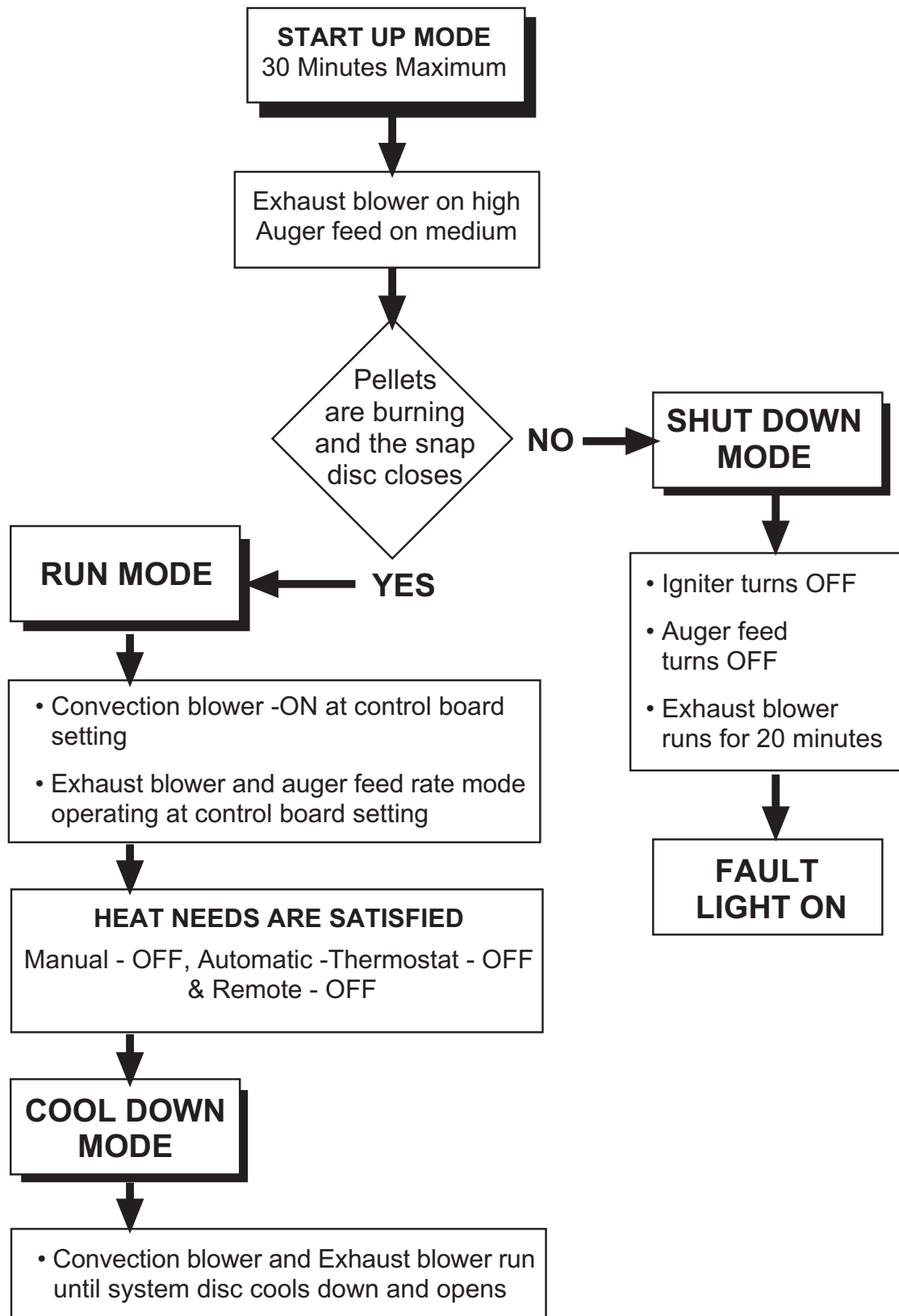


Pellet Appliance Operation Sequence

- Pellet appliance operation sequence is important to understand when servicing pellet appliances.
- Below are the steps our pellet appliances go through. The following page provides a detailed flow chart of what happens in each step.

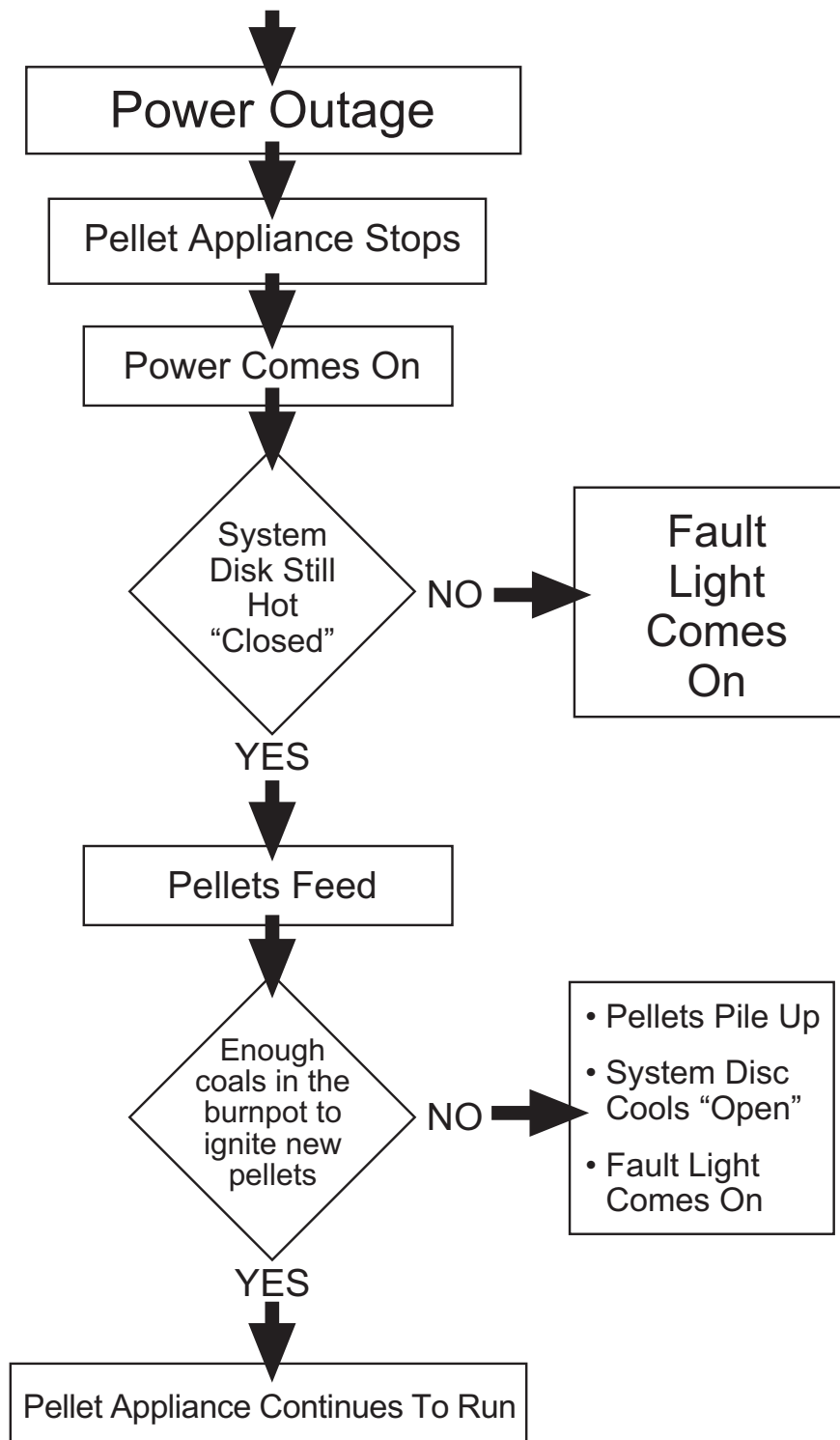


TRAVIS INDUSTRIES PELLET PRODUCTS



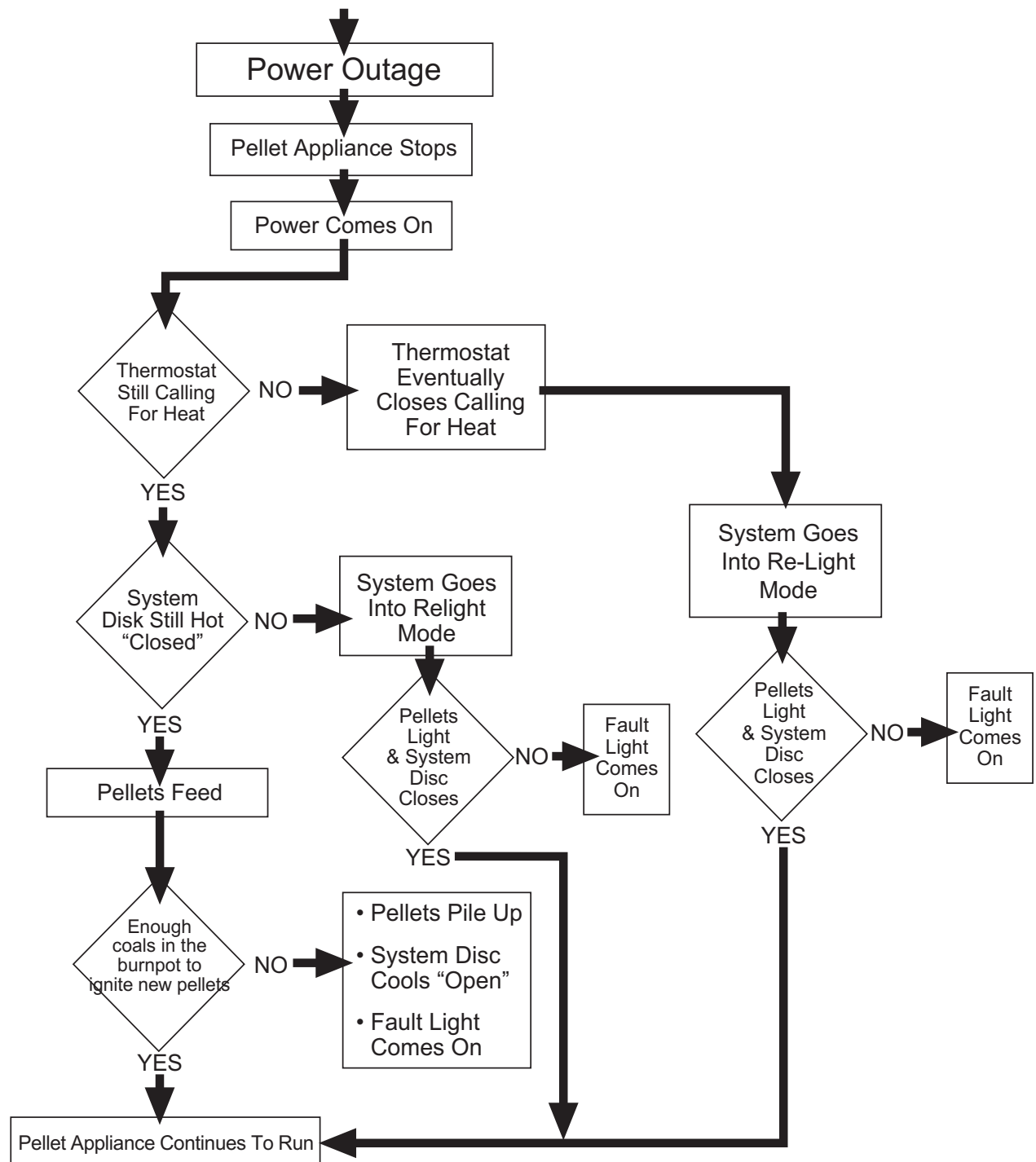
Power Outage

In manual operation or remote (but is not remote thermostat)



Power Outage

In automatic operation or remote thermostat (but is not remote thermostat)





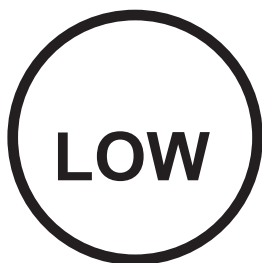
**3 Seconds ~~ON~~
~~OFF~~ 2 Seconds**

**RED
LIGHT**



**3 Seconds ~~ON~~
~~OFF~~ 6 - 9 Seconds**

**YELLOW
LIGHT**



**3 Seconds ~~ON~~
~~OFF~~ 12 - 15 Seconds**

**GREEN
LIGHT**

Configuring the Control Board

Diagnostic Codes (Qualified Service Personnel Only) - Continued

Safety or Hopper Snap Disk Fault

Fault light and #6 heat indicator blinking.

This fault code is caused by the safety or hopper snap disk registering an over-heated appliance during operation. The control board then shuts down the auger and the convection and combustion blower will run at maximum output for a 40 minute safety cool down cycle. The only way to stop this cool down is to unplug the appliance to reset the control board.

Likely causes:

- Faulty snap disk
- Corroded, loose or broken Snap Disk wiring.
- Failed, plugged or blocked convection blower.
- Reduced air flow into the motor compartment such as blocked air vents on panels or doors.
- Missing refractory.
- Improper fuel type.
- Unauthorized parts used in the pellet feed system.

Thermostats & Remotes

- Thermostats and remotes make for convenient and automatic operation of the pellet appliance.
- Our large pellet stoves and inserts ship with a wall thermostat.
- A wall thermostat is the best automatic device for customers who desire a more constant room temperature comfort.
- Not all people are qualified to operate remotes, some will always have problems with their remote.
- Remote operation will not show an immediate fire change (like channel changing on a TV)
- Our modulating remote has 6 fire and fan settings.

Pellet Wall Thermostat

COMPATIBILITY

- All Travis Gas Stoves & Inserts
- Newport Pellet Stoves & Inserts
- Pioneer Pellet Stoves & Inserts
- Astoria Pellet Stoves & Inserts
- Yankee Pellet Stoves & Inserts

ITEMS NEEDED FOR ASSEMBLY

- Standard Screwdriver
- Additional tools may be required for laying the thermostat wire
- You may need additional tools to access the on/off switch on certain gas heaters - refer to the instructions in the owner's manual.

PACKING LIST

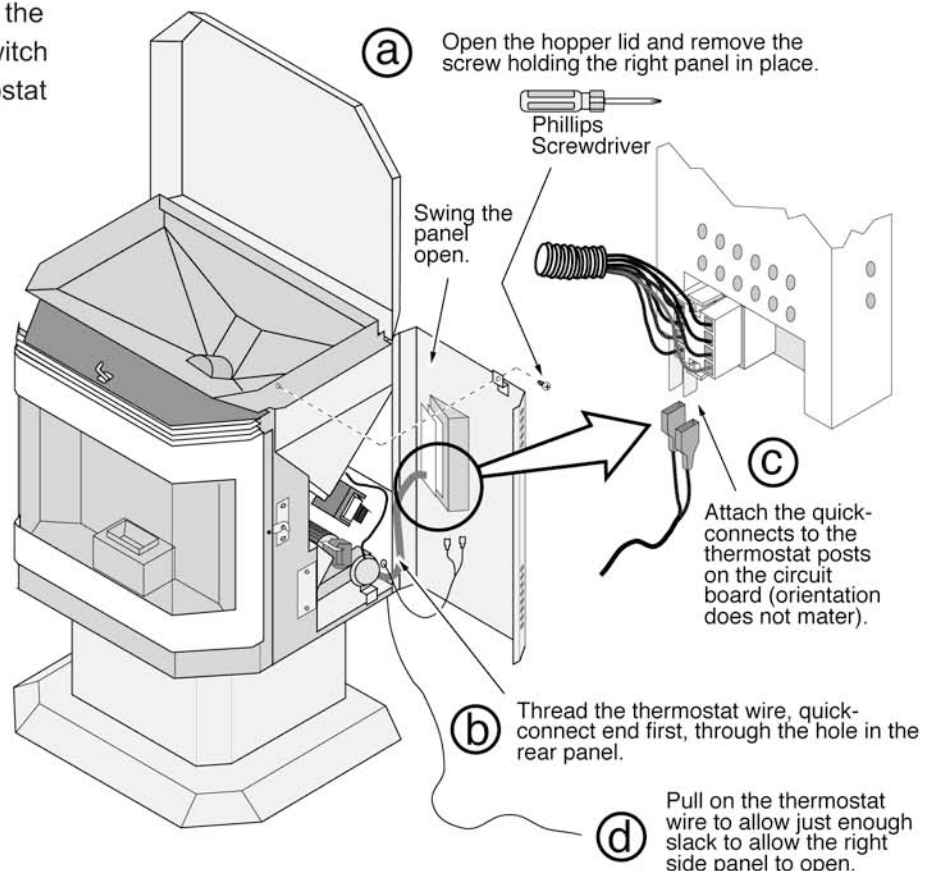
- Thermostat
- Thermostat wire (20' long)
- 2 Screws (for attaching the thermostat to wall)

INSTALLATION INSTRUCTIONS

! This kit must be installed by a qualified technician.

! Do not connect 110 VAC to the gas control valve or on/off switch on gas heaters or the thermostat posts on pellet heaters.

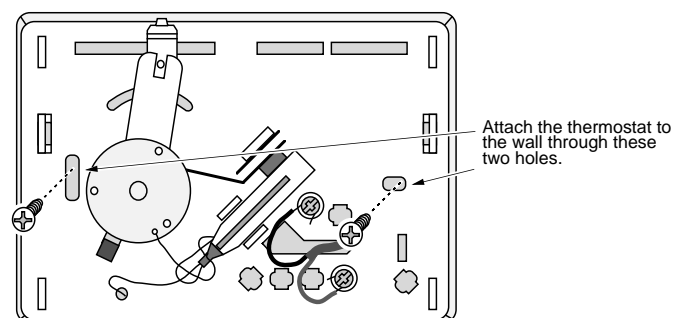
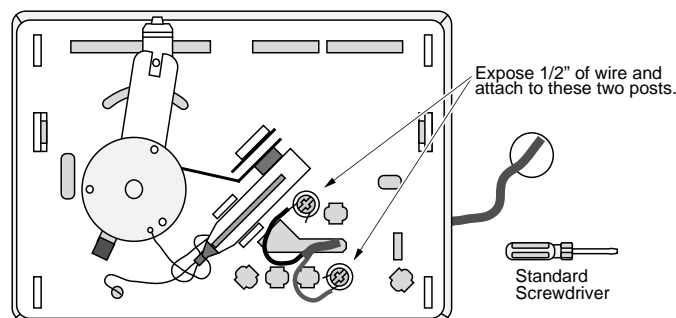
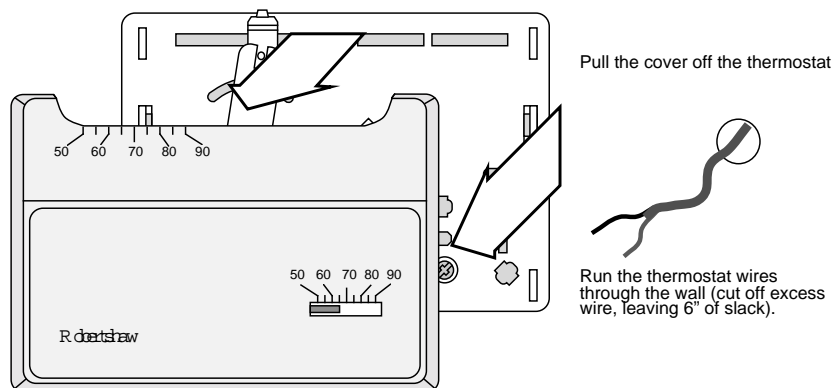
Pellet Heater Installation
Attach the thermostat wire to the circuit board.



Pellet Wall Thermostat

Thermostat Placement and Installation

1. Determine a location for the thermostat that is within range of the 20' length of thermostat wire. It should be centralized in the room and away from the heater. The wire may be routed externally on the wall or behind the wall (preferred). Run the thermostat wire to this location. Use nylon ties, if necessary to keep the wire from contacting any hot portions of the heater.
2. Follow the directions below to attach the thermostat and thermostat wires.



Pellet Remote Control

CHECK CONDITION OF SHIPMENT

Upon receipt of this kit, check the condition of the packaging. Damage to the package should be noted on the carrier's freight receipt. Any damage claims as a result of shipping must be handled through the shipper. Travis Industries will provide assistance in resolving shipping claims or replacing items not included in the package. Please report any missing items immediately.

COMPATIBILITY

• All Travis Gas Stoves & Inserts • Newport (Avanti) Pellet Stoves & Inserts • Pioneer (Heritage Bay) Pellet Stoves & Inserts

ITEMS NEEDED FOR ASSEMBLY

You may need tools for to access the on/off switch on gas heaters - refer to the instructions below and in the owner's manual.

PACKING LIST

• Receiver • Transmitter • Receiver Hanger • Pellet Stove Connector Wires • Gas Stove Connector Wires • 3 AAA Batteries

FCC REQUIREMENTS

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiver.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

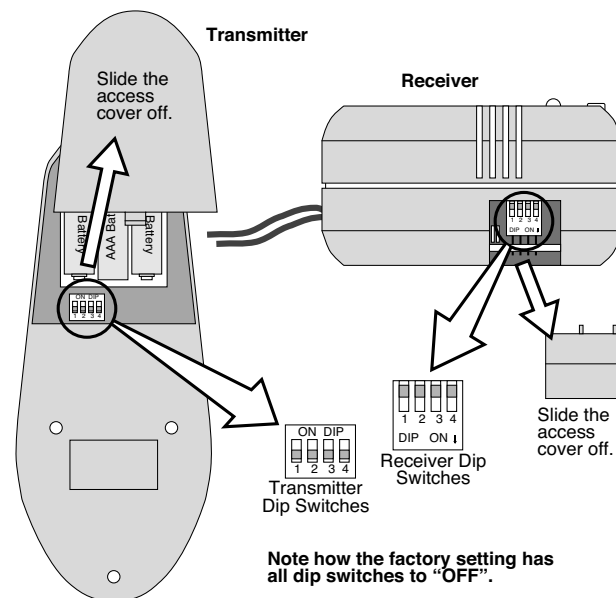
CANADIAN EQUIPMENT REQUIREMENTS

This digital apparatus does not exceed the (Class A/Class B) limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques (de la class A/de la class B) prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

This device complies with RSS-210 of Industry and Science Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

INSTALLATION INSTRUCTIONS

- ! Shut off power to the appliance and allow it to cool prior to installation.
 - ! This kit must be installed by a qualified technician.
 - ! All 110 VAC wiring must be done by a qualified electrician and shall be in compliance with local codes and the National Electric Code ANSI/NFPA No. 70 (in the United States), or with the current CSA C22.1 Canadian Electric Code (in Canada).
 - ! Do not connect 110 VAC to the gas control valve or on/off switch on gas heaters or the thermostat posts on pellet heaters.
- 1 Remove the cover from the back of the transmitter and receiver. Slide the code switches to a random position on the receiver. Then position the switches on the transmitter to match the dip switch positions on the receiver. Prior to replacing the cover, place three AAA batteries inside the transmitter.

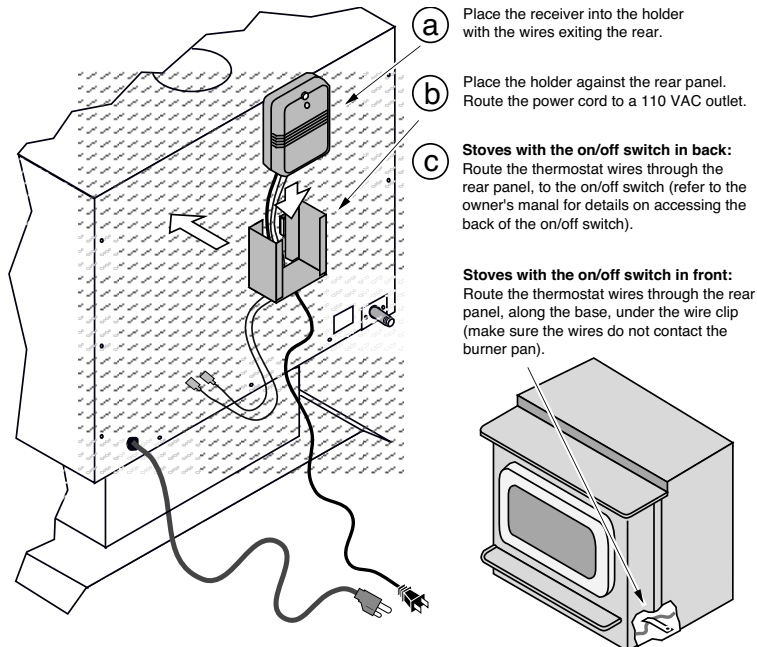


Pellet Remote Control

Gas Stove Installation

Place the receiver, with holder, on the back of the heater and route the receiver wires to the on/off switch (see the illustration below). Connect the receiver power cord to a 110 VAC outlet.

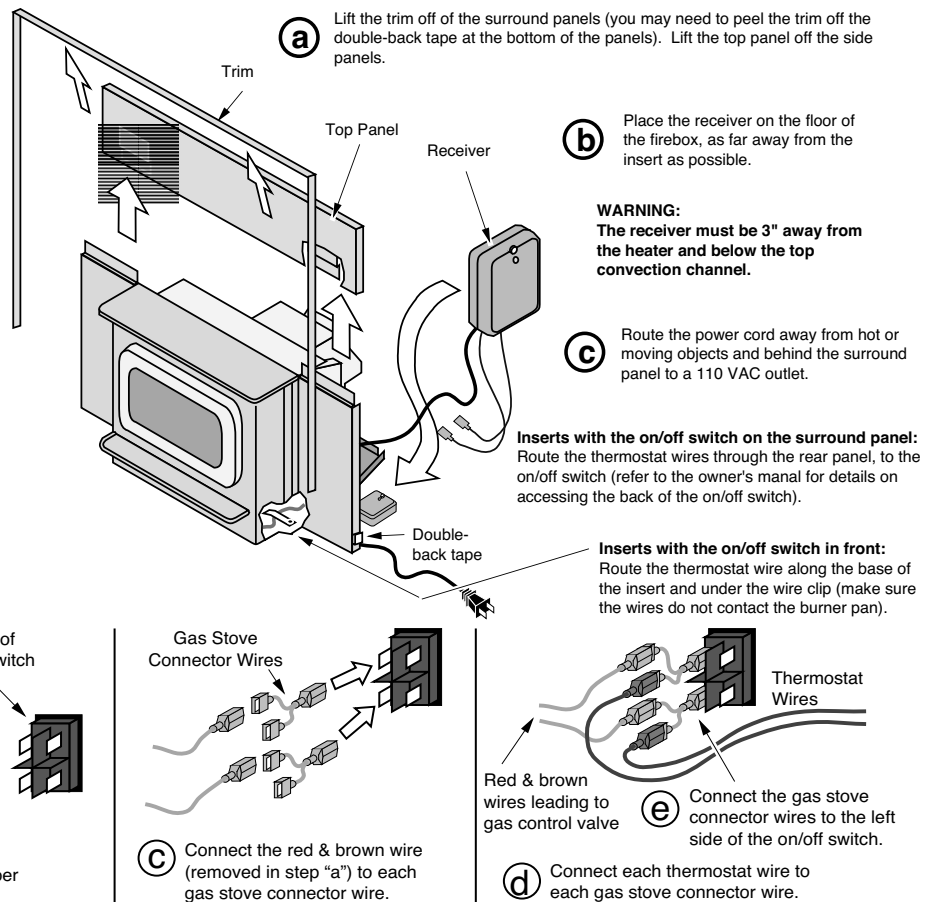
Attach one receiver and one gas control valve wire (orientation does not matter) to each gas stove connector wire - then attach the gas stove connector wires to the on/off switch (see the illustration at the bottom of the page).



Gas Fireplace Insert Installation

Place the receiver, with holder, on the back of the right side surround panel and route the receiver wires to the on/off switch (see the illustration to the right). Connect the receiver power cord to a 110 VAC outlet.

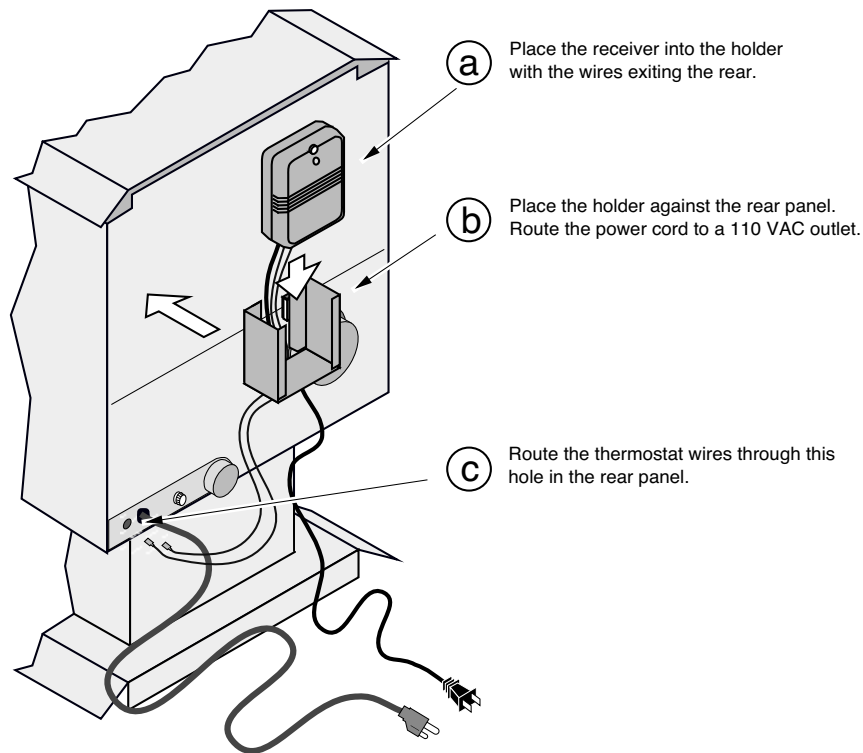
Attach one receiver and one gas control valve wire (orientation does not matter) to each gas stove connector wire - then attach the gas stove connector wires to the on/off switch (see the illustration below).



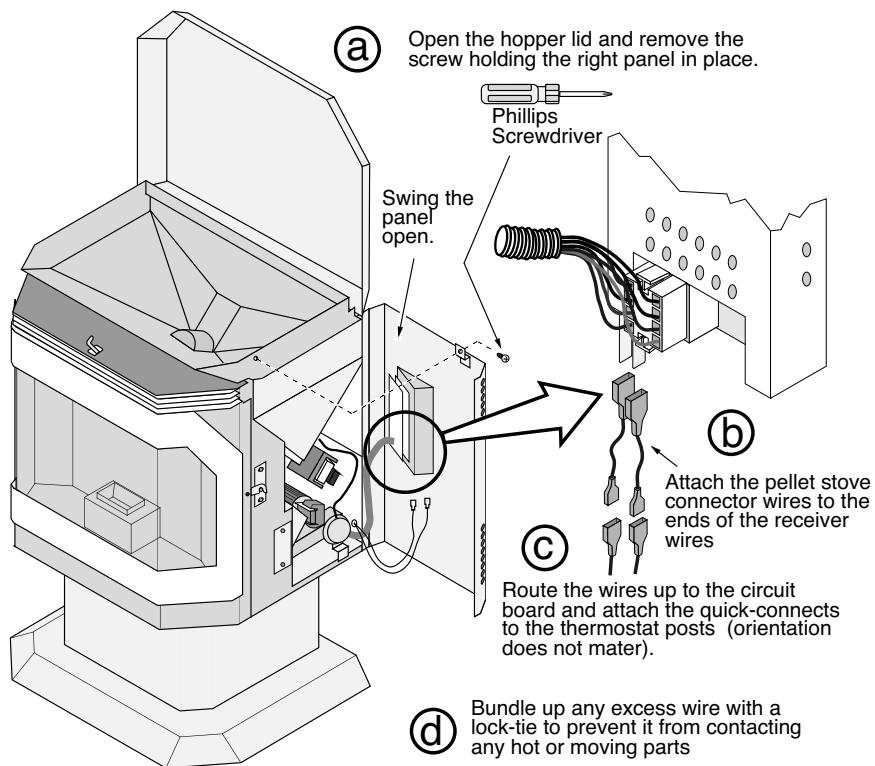
Pellet Remote Control

Pellet Stove Installation

Place the receiver holder on the back of the heater and route the receiver wires to the on/off switch (see the illustration to the right). Connect the receiver power cord to a 110 VAC outlet.



Attach the pellet stove connector wires to the ends of the receiver wires. Then attach the connector wires to the back of the circuit board (see the illustration to the right).



Pellet Remote Control

NOTE: The pilot flame must be lit, the gas control valve turned to "ON", and the on/off switch turned to "OFF" for the remote to work correctly.

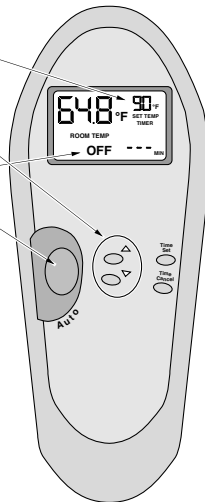
NOTE: This kit must be installed by a qualified technician.

MANUAL MODE:

TO SET TO MANUAL:
Use the arrow keys to adjust the target temperature to 90°.

TO TURN ON AND OFF:
Use this key to toggle the heater on and off. The display will indicate the status.

NOTE:
If the room exceeds 90°, the heater will shut off.



THERMOSTAT MODE:

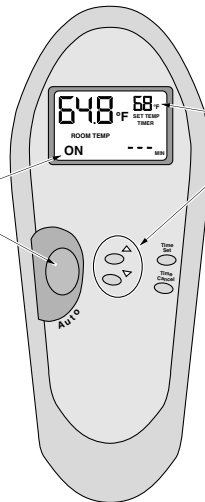
TO SET TO THERMOSTAT MODE:
Use this key to toggle the thermostat mode on. The display will indicate "ON" in the lower left.

HINT:
If your heater turns on and off frequently, adjust the flame height (burn rate on pellet heaters) down slightly for a more consistent heat output.

TO ADJUST TARGET TEMPERATURE:
Use the arrow keys to adjust the target temperature to the desired level.

The heater will turn on and off to keep the room temperature near the target temperature.

IMPORTANT OPERATIONAL NOTE:
The thermostat has a built-in time delay to keep the heater from constantly turning on and off. This means the target temperature may be slightly higher (2° or 3°) than the room temperature – do not adjust the target temperature – the heater will turn on in a few minutes.



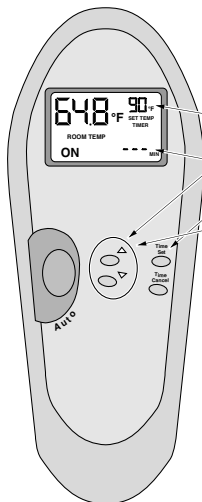
TIMED MODE:

TO SET TO TIMED OPERATION:

- Use the arrow keys to adjust the target temperature to 90°.
- Press the "Time Set" button - the " - - - " will start to flash.
- Use the arrow keys to set the number of minutes you would like the heater to stay on.

The heater will turn on and stay running for the number of minutes displayed.

NOTE:
If the room exceeds 90°, the heater will shut off.

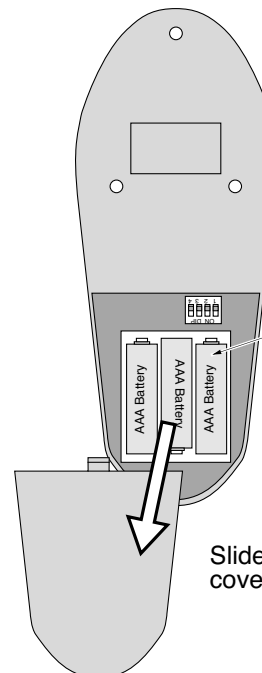


REPLACING THE BATTERIES:

Transmitter

Use "AAA" batteries with the remote

Slide the access cover off.



POWER OUTAGES:

If a power outage occurs, the receiver will turn the heater off. Once power is restored, the remote will turn the heater on (if the remote calls for heat) within 30 minutes. If you wish to over-ride the remote and turn the heater on (gas stoves only), turn the on/off switch on the gas heater to "ON".

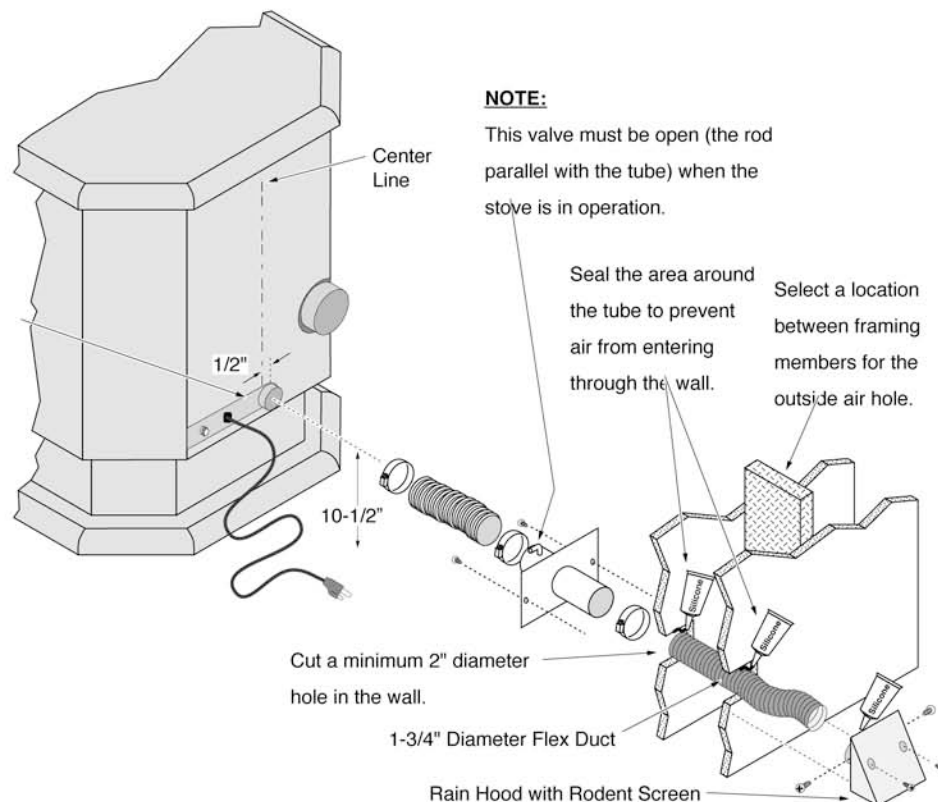
Freestanding Stove Outside Air (Small or Large Pellet Stove)

Outside Air (used for combustion)

- Must not be drawn from an enclosed space (garage, unventilated crawl space).

HINT: Travis Industries strongly suggests outside air for all residential installations, especially for those that are energy efficient, air-tight homes.

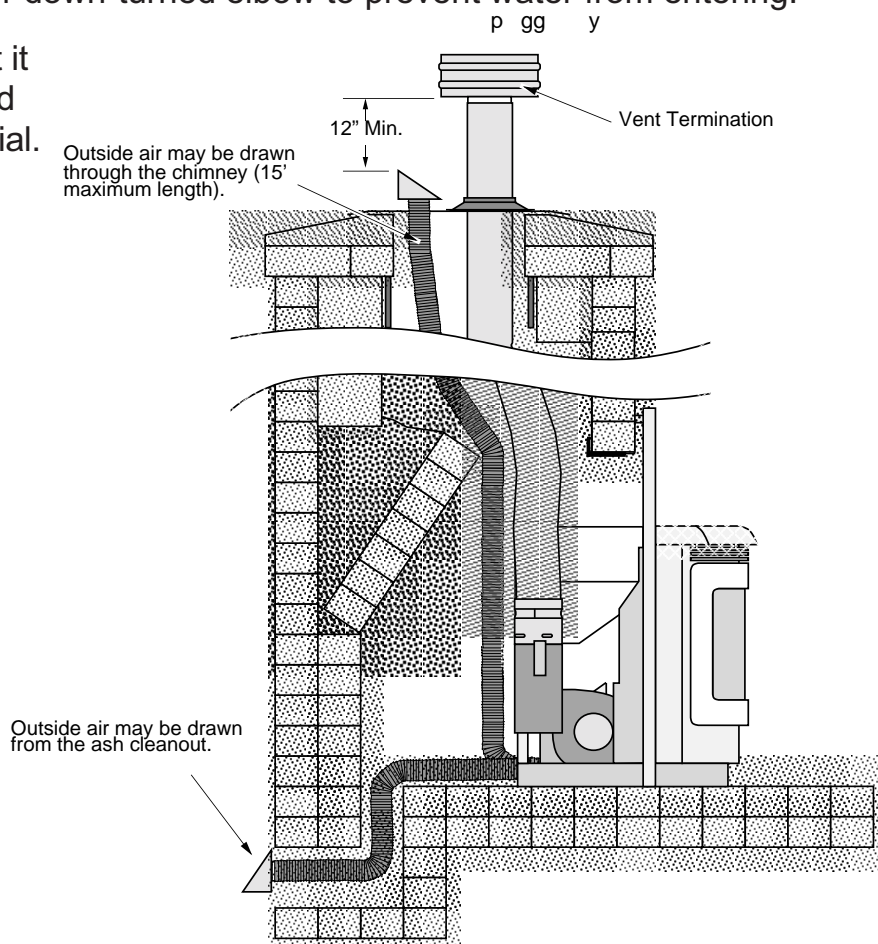
- Must not be over 15' long.
- Must be made with 1 3/4" diameter or larger metal or aluminum duct with a metal screen attached to the end to keep out rodents (P.V.C. or other combustible materials may not be used). We recommend the Travis Industries Outside Air Kit (part # 99200136).
- Must not terminate above or within 1' of the chimney termination.
- Must have a rain cap or down-turned elbow to prevent water from entering.
- Must be located so that it will not become plugged by snow or other material.



Fireplace Insert Outside Air (Small or Large Pellet Insert)

Outside Air (used for combustion)

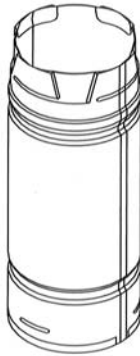
- Outside air is optional (except in mobile homes or when required by local building codes).
- Must not be drawn from an enclosed space (garage, unventilated crawl space).
- Must not be over 15' long.
- Must be made with 1 3/4" diameter or larger metal or aluminum duct with a metal screen attached to the end to keep out rodents (P.V.C. or other combustible materials may not be used). Use the Travis Industries Outside Air Kit (part # 99200136).
- Must not terminate above or within 1' of the chimney termination.
- Must have a rain cap or down-turned elbow to prevent water from entering.
- Must be located so that it will not become plugged by snow or other material.



Pellet Vent

Pellet Vent

- Rigid Pipe
- 3" & 4"
- 6", 1', 2', 3',
& 5' Lengths
- Galvanized
or Black



- Ridged pipe comes in 3" & 4" diameters.
- Lengths include 6", 1', 2', 3', & 5'.
- Galvanized or painted black
- Flex pellet vent comes in 3" & 4" diameters.

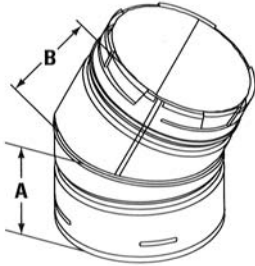
Pellet Vent

- Flex Pipe
- 3" & 4" Dia.
- 5' Length
- 4 Ply S.S. Flex
- Twist Lock
- Ceramic Rope Gasket

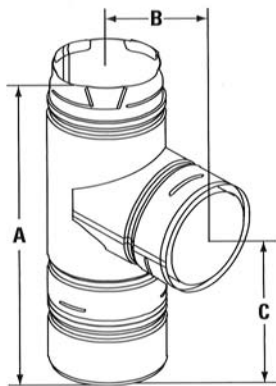
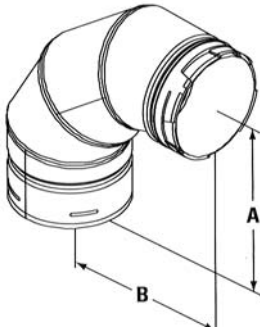


- Length is 5'.
- 4 ply Type 430 S.S. flex.
- Ceramic rope gasket is used to prevent fly ash leakage.
- Flex pipe may be used in combination with ridged pipe when venting an insert.

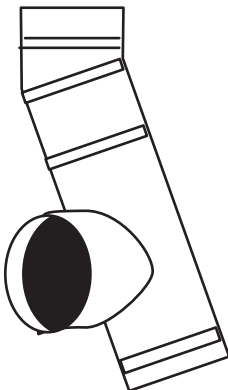
Pellet Vent



- Elbow comes in 45° or 90° and in 3" or 4" diameters.



- Tee with clean-cut in 3" or 4" diameters.

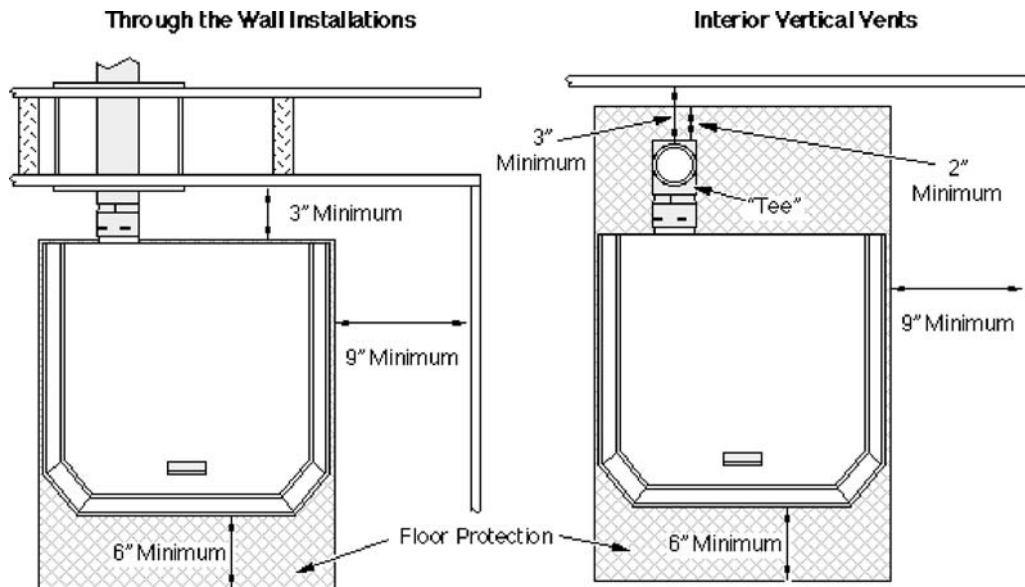


- Center flue adapter in 3" or 4" diameters.

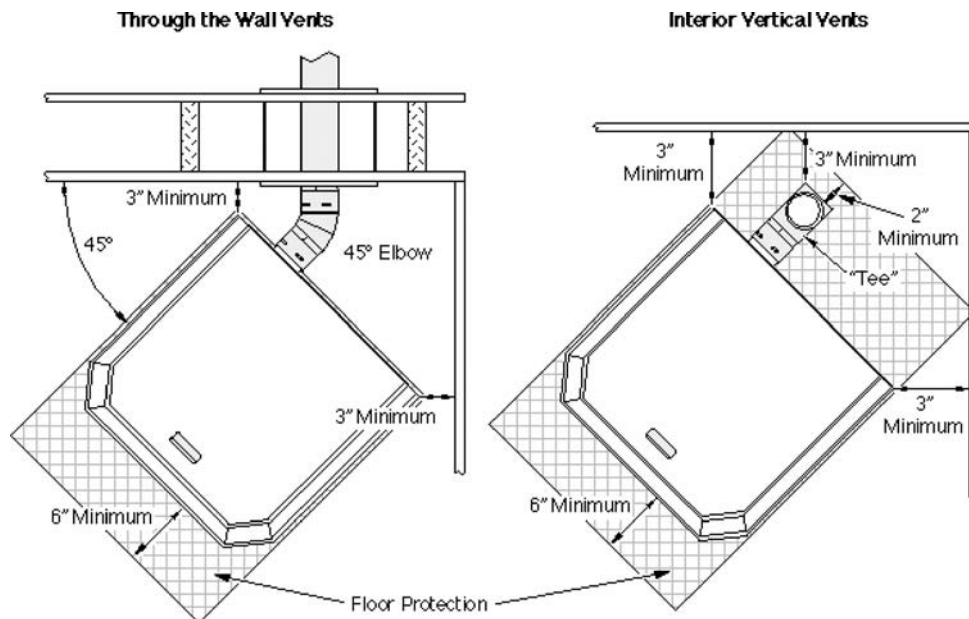
Pellet Vent

- Pellet vent is a Type “L” classified vent.
- Type “L” vent is rated for flue temperatures up to 570°F.
- Pellet Vent is a two wall constructed vent
- The inner vent is made of stainless steel - .012 Type 430 SS.
- The outer liner is made of galvanized steel - .018.
- Each joint contains a high temperature ceramic rope gasket to prevent fly ash leakage.
- Pellet vent employs easy, twist lock connections.

Clearances - Straight Installation



Clearances - Corner Installation



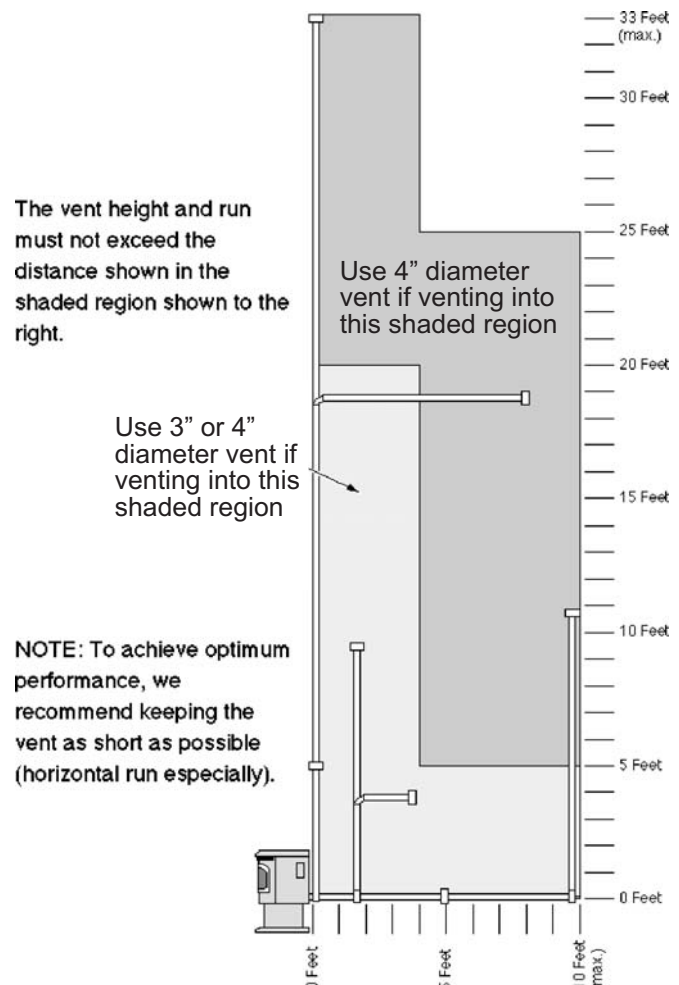
Note: If interior vertical pellet vent is used, the clearance to the backwall is determined by the upward-turning elbow or "Tee." It will vary in depth depending on the brand of pellet vent used (it is approximately 5"). Before placing the heater, connect the elbow or "Tee" and measure off the 3" clearance.

Venting the Pellet Stove

- Pellet vent must maintain a minimum 3" clearance to any combustible (install vent at clearances specified by the vent manufacturer).
- Do not connect the pellet vent to a vent serving any other appliance or stove.
- Do not install a flue damper in the exhaust venting system of this unit.
- Use an approved wall thimble when passing the vent through walls and a ceiling support/fire stop spacer when passing the vent through ceilings (make sure to maintain 3" clearance to any combustibles).
- No more than 180 degrees of elbows (two 90 degree elbows, or two 45

Maximum Venting Distance:

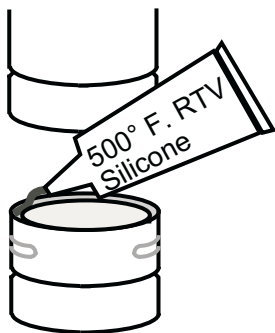
- Vent must have a support bracket every 5' of pellet vent when exterior of structure.
- If the heater is installed at an altitude over 4,000' use 4" diameter for all applications.



Pellet Vent Type

- Must be Type "L"(except for masonry fireplace installations) - or - connect the vent to a factory built type "A" chimney (use an adapter and seal all joints).

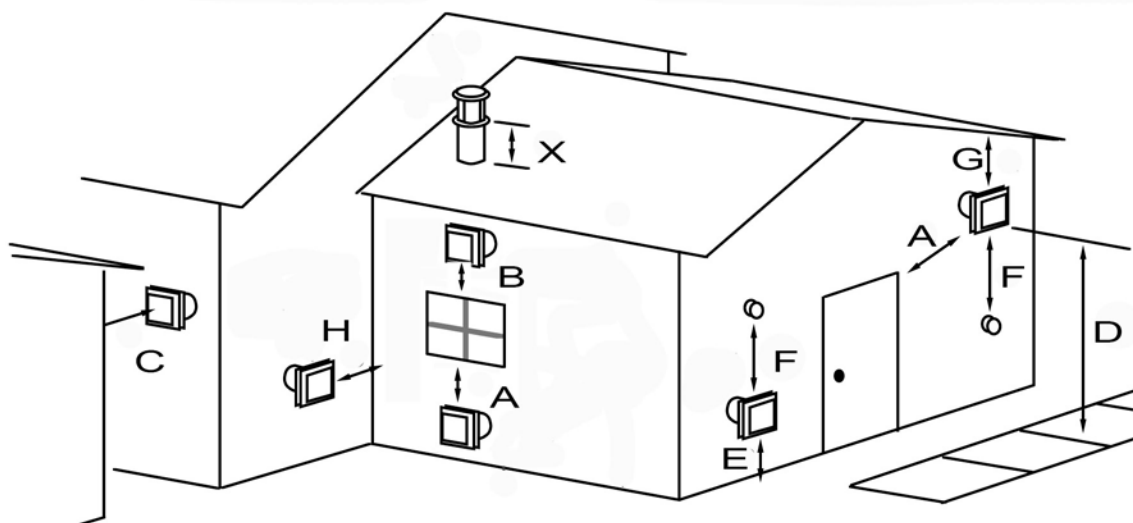
Installing the Pellet Vent



Seal each vent section by applying a liberal amount of 500° F RTV silicone around the gap between sections.

- Horizontal sections must have a 1/4" rise every 12" of travel.
- Pellet vent connections must be sealed airtight with 500° F. RTV silicone and screwed together with at least three sheet metal screws.

HINT: The Travis Industries Center Flue Adapter has less depth than a standard "tee" and centers the flue, easing installation.



NOTE: Measure clearances to the nearest edge of the exhaust hood.

Pellet Vent Termination (See the illustration above)

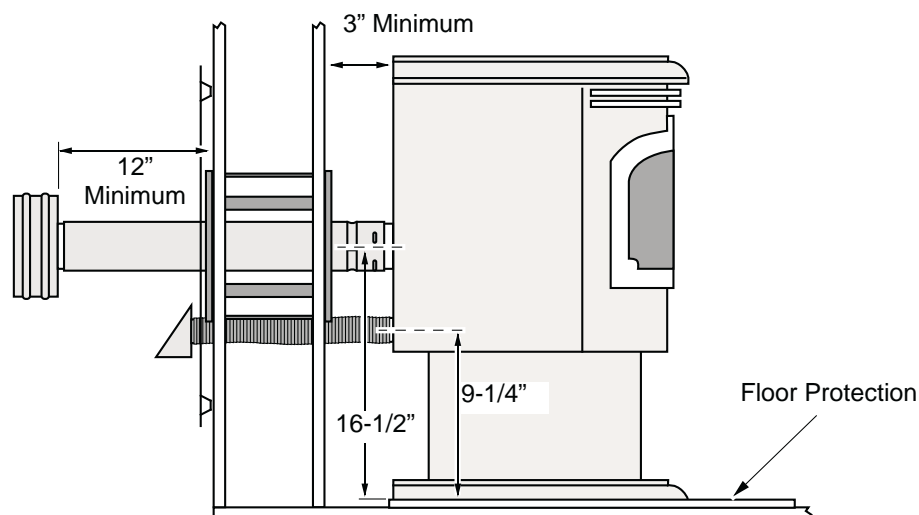
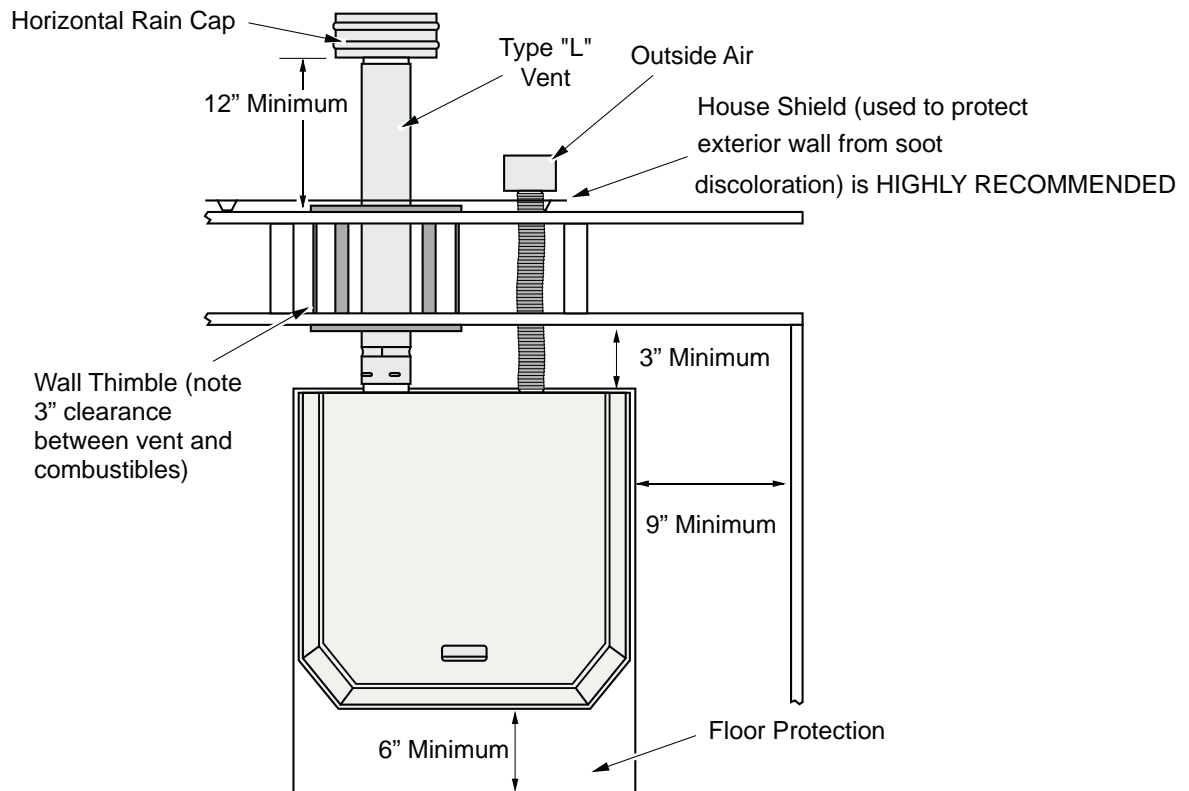
- Must have an approved cap (to prevent water from entering) or a 45° downturn.
- If the termination is located on a windy side of the house, an approved house shield is recommended to prevent soot from building up on the side of the house.
- Must not be located where it will become plugged by snow or other material.
- Horizontal terminations must protrude 12" from the wall, vertical terminations require 24".

- A Minimum 4' clearance below or beside any door or window that opens
- B Minimum 1' clearance above any door or window that opens
- C Minimum 2' clearance from any adjacent building
- D Minimum 7' clearance above any grade when adjacent to public walkways
NOTE: Vent may not terminate in covered walkway or breezeway.
- E Minimum 2' clearance above any grass, plants, or other combustable materials
- F Minimum 3' clearance from any forced air intake of any other appliance
- G Minimum 2' clearance below eaves or overhangs
- H Minimum 1' clearance horizontally from combustable wall
- X Must be a minimum of 2' above the roof

TRAVIS INDUSTRIES PELLET PRODUCTS



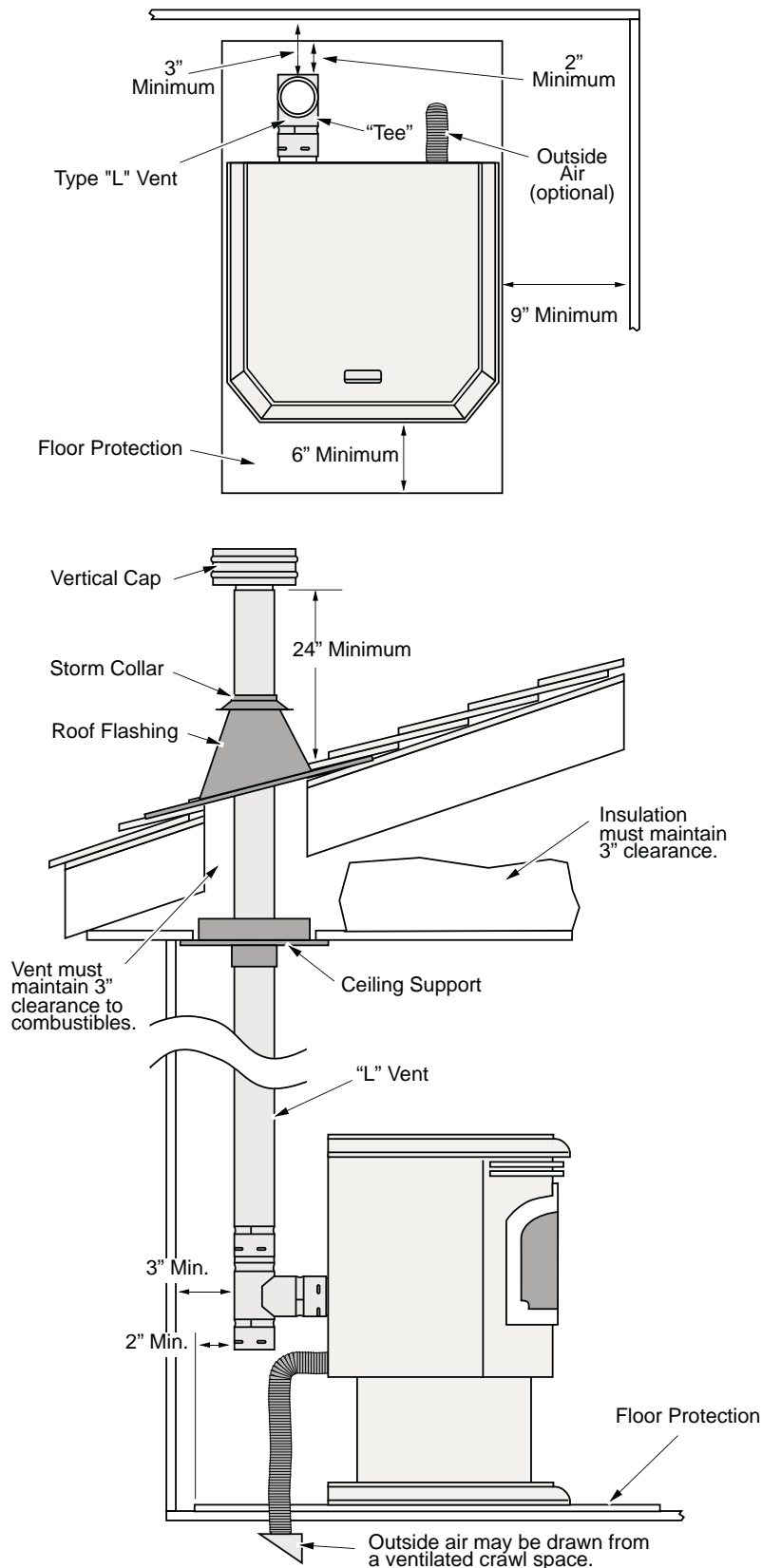
Installation Example: Direct "Through-the-wall" Installation



TRAVIS INDUSTRIES PELLET PRODUCTS



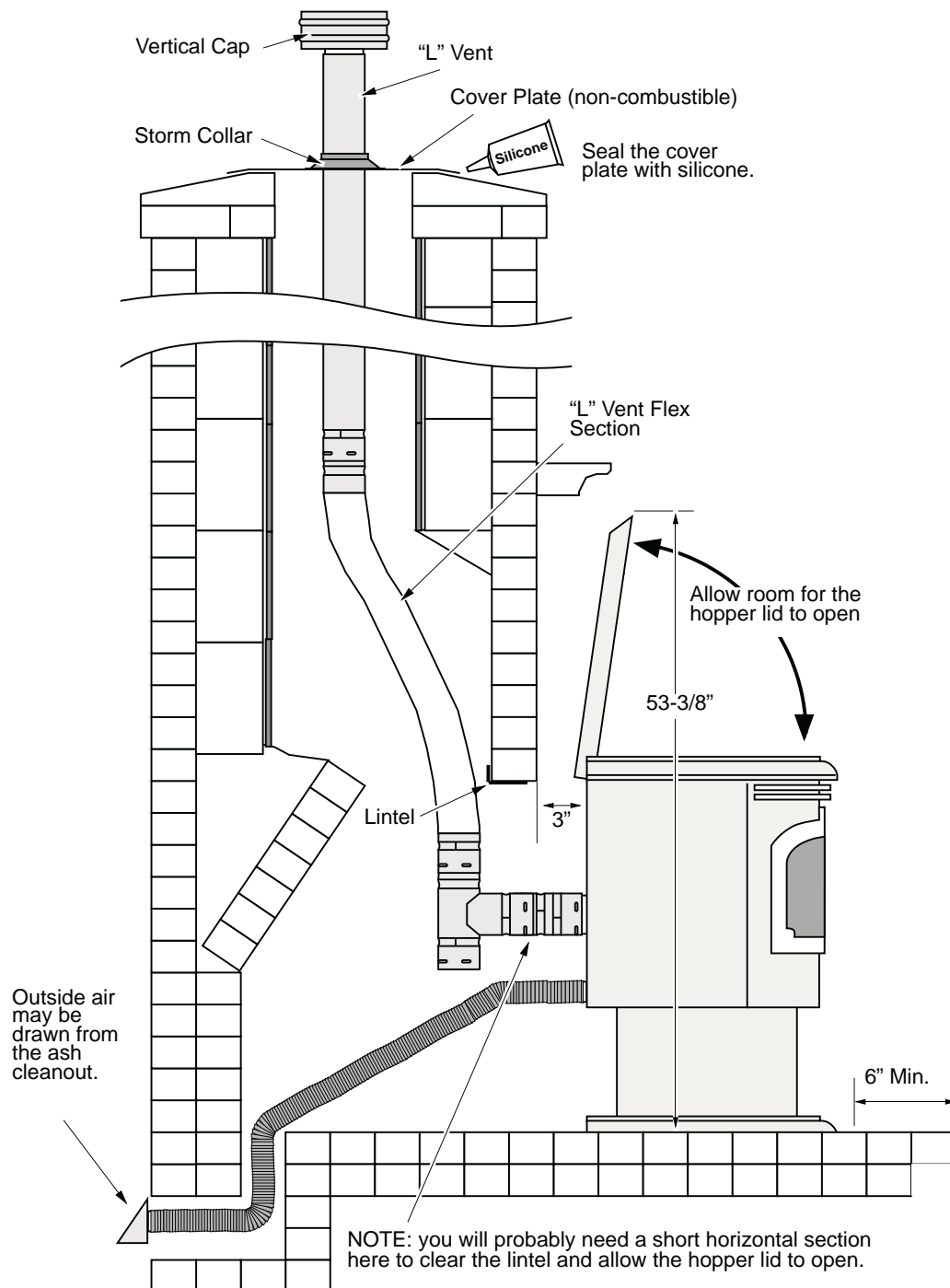
Installation Example: Direct "Through-the-wall" Installation



TRAVIS INDUSTRIES PELLET PRODUCTS



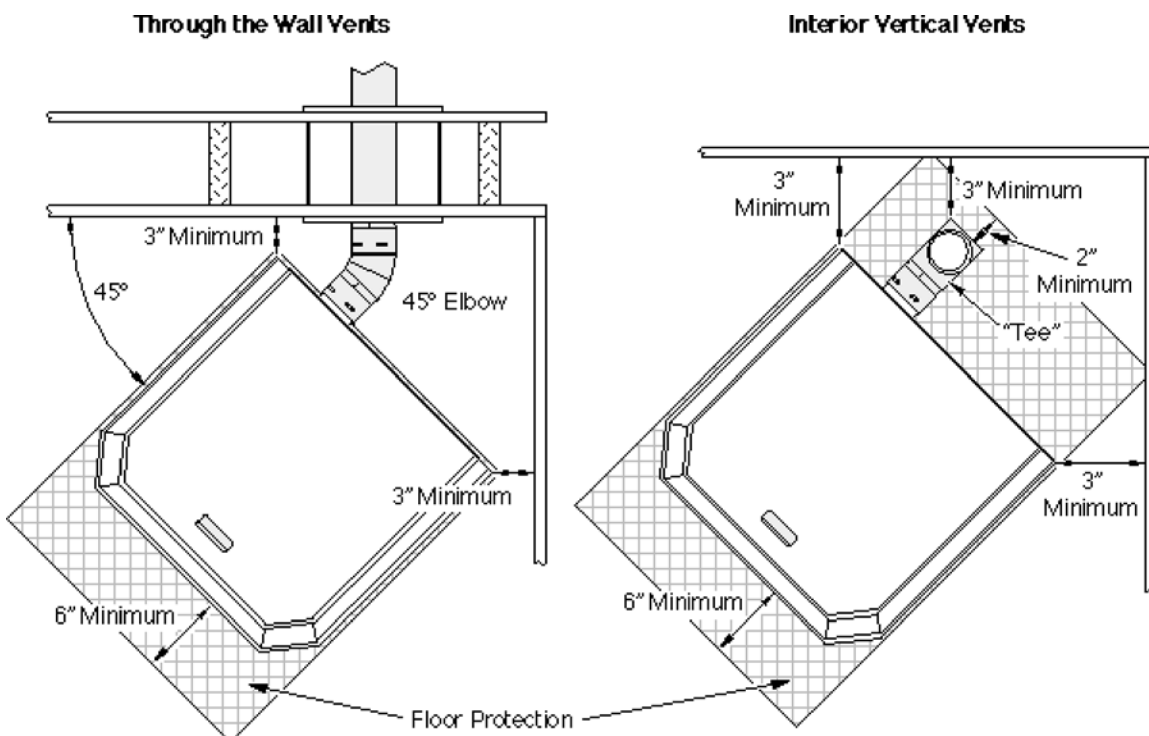
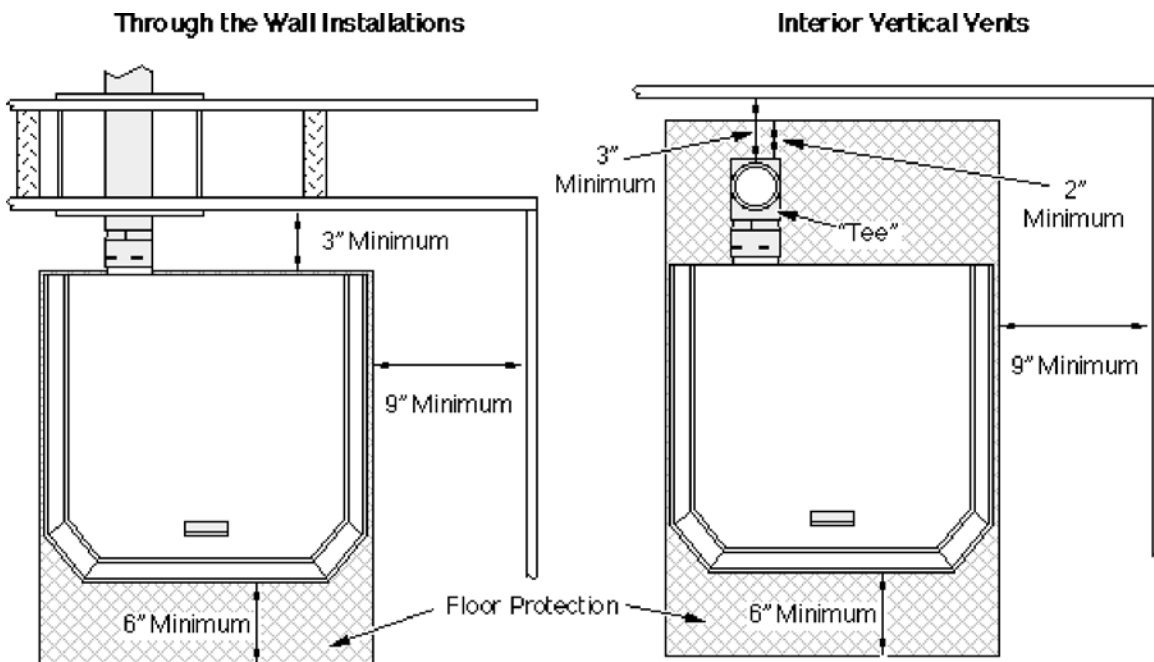
Installation Example: Hearth Fireplace (Masonry or Z.C. (metal))



TRAVIS INDUSTRIES PELLET PRODUCTS



Clearances - Straight Installation



Small Stoves/Inserts Upgrade Kit



Restrictor Retrofit Installation

For the Pioneer PS & PI, Newport PS & PI -- See the SKU's below

Compatibility

Pioneer PS or Newport PS	221-11090
Pioneer Bay PI	221-11085
Newport Bay PI	221-11088

When to Use This Kit

This kit replaces the stock intake restrictor with a new restrictor that allows for restrictor adjustment while the heater is in operation. This kit is only intended for those units requiring frequent restrictor adjustment (often due to inconsistent fuel).

Important Warnings

Turn off electricity to the appliance and make sure it has fully cooled prior to conducting service.

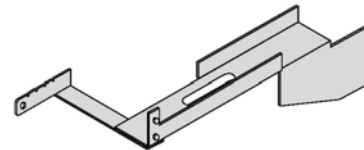
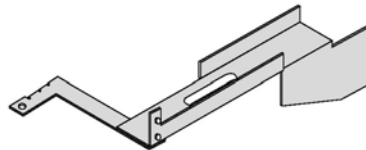
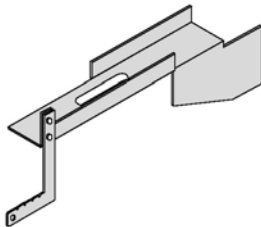
Packing List

- Restrictor Plate with Handle (see the illustration below)

Pioneer PS and Newport PS

Newport Bay PI

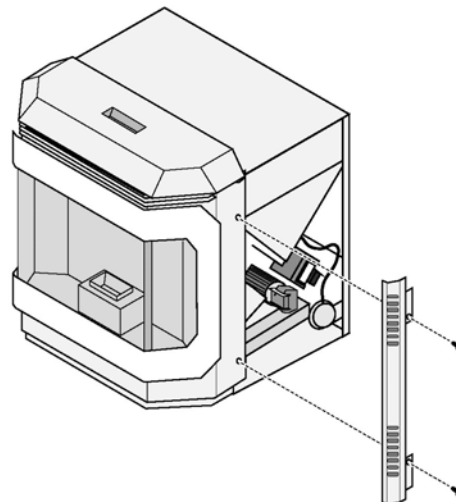
Pioneer Bay PI



- Bullet Catch Bracket
- Hex Nut (1/4-20)

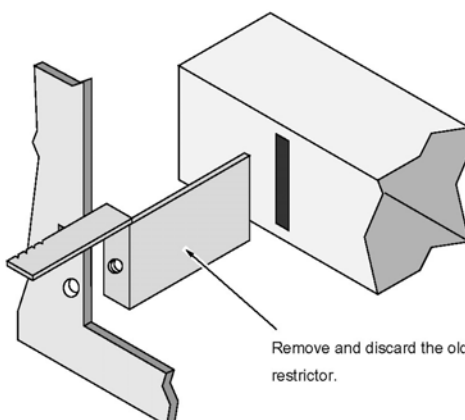
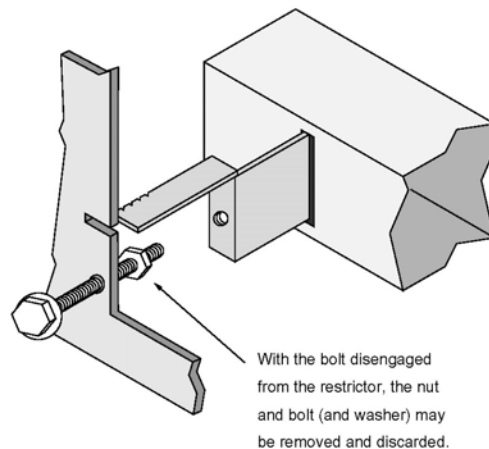
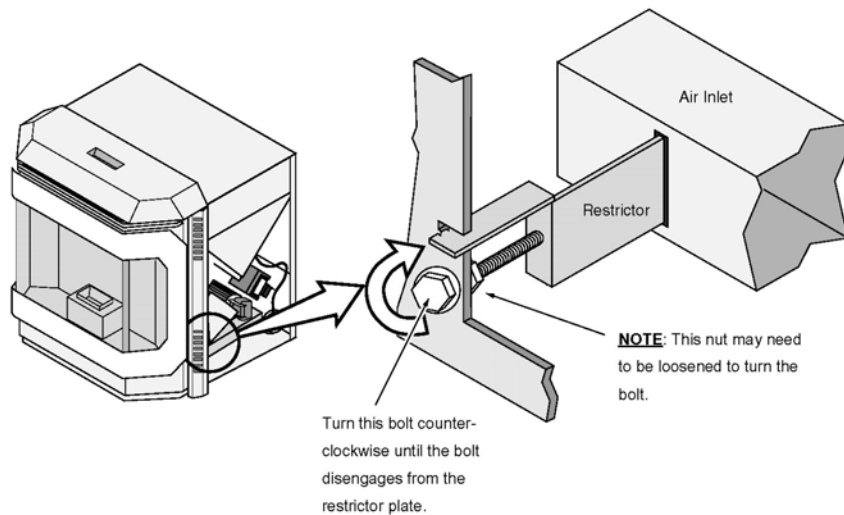
Installation

1. Gain access to the right side of the heater. On inserts, remove the surround panels. On stoves, open the hopper, remove the screw holding the right side panel in place, and swing the panel open.
2. For inserts, remove the right side convection front (see the illustration to the right).



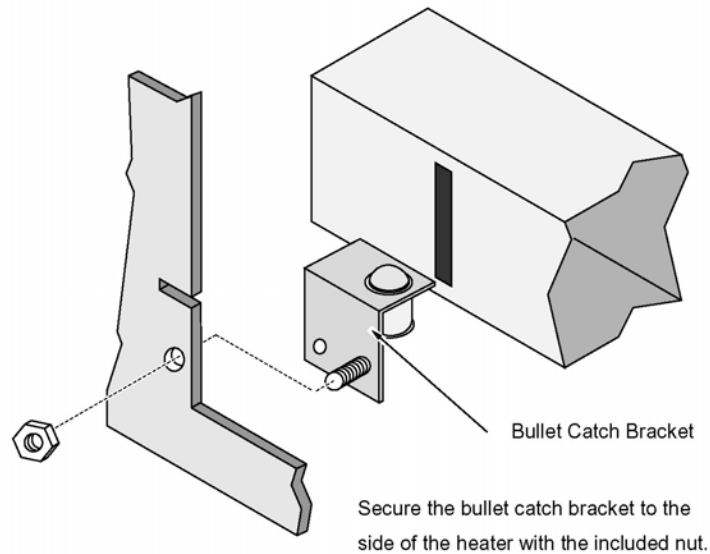
Small Stoves/Inserts Upgrade Kit

3. Remove the stock restrictor following the directions below.

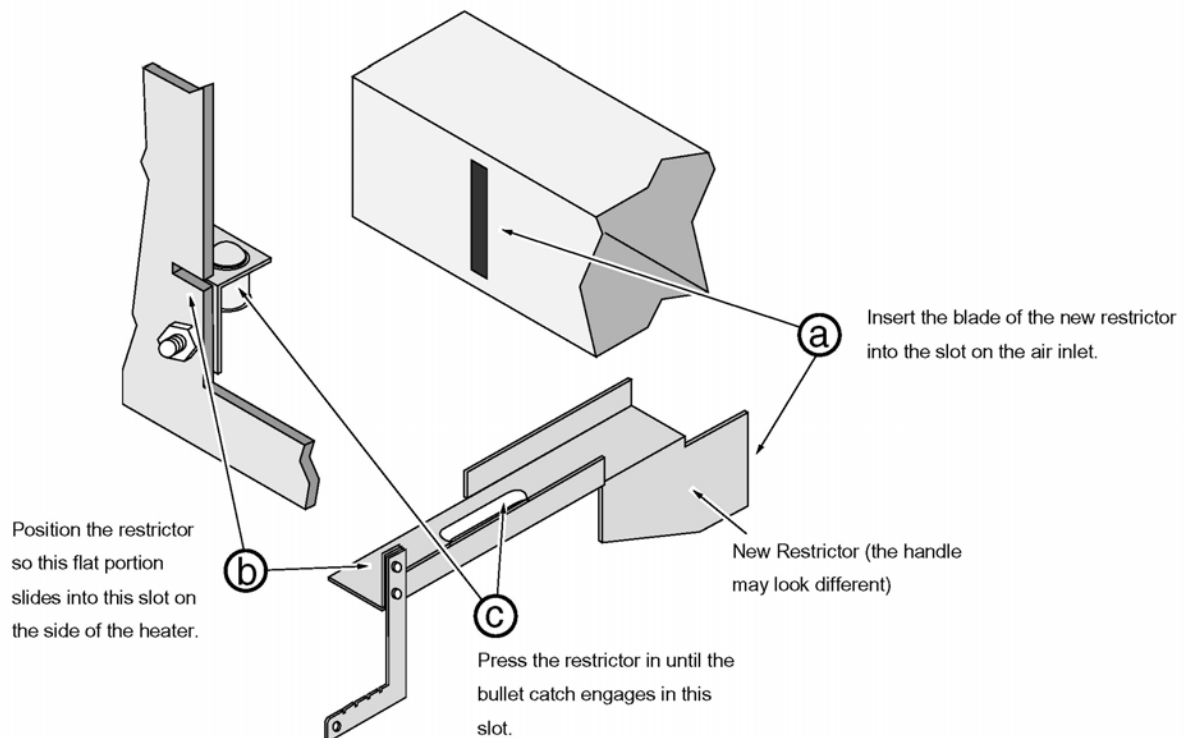


Small Stoves/Inserts Upgrade Kit

4. Install the bullet catch bracket following the directions below.



5. Install the new restrictor following the directions below.



6. Return the heater to its original configuration (on inserts replace the side convection front).

Small Stoves/Inserts Restrictor Setting Instructions

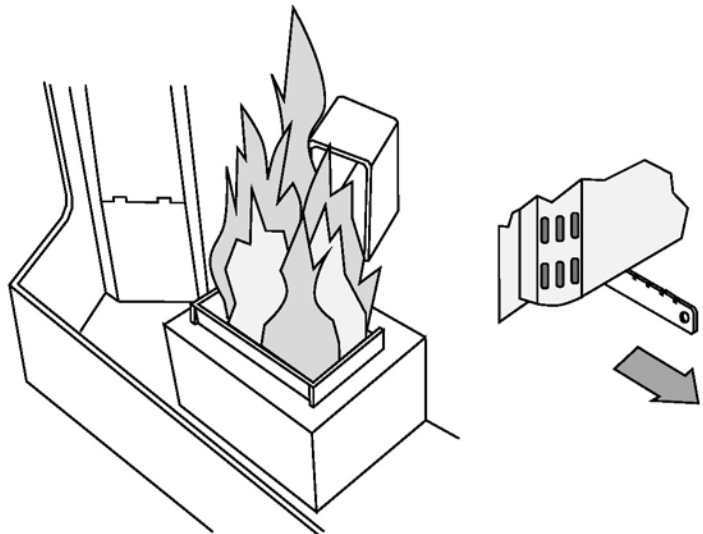
Restrictor Adjustment

The restrictor “fine tunes” your appliance, adjusting the amount of air flowing to the flame.

NOTE: the optimal restrictor position will vary over time as soot builds up inside the exhaust system.

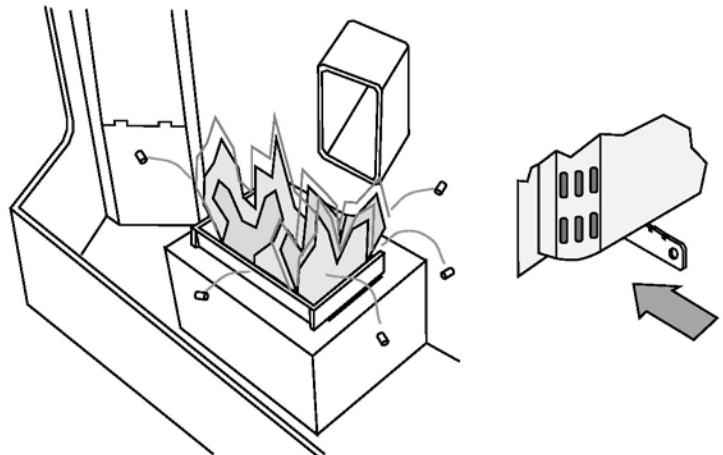
Not Enough Air:

If clinkers develop or the flame appears lazy and slow to blow the ash out of the firepot, pull the restrictor outward until the flame becomes active and the firepot holes remain clean. NOTE: If the restrictor is fully out yet the firepot does not remain clean, the stove needs to be cleaned and checked for air leaks (see “Maintenance” section of this manual).



Too Much Air:

If the flames are too active (small, flickering flames) or if burning pellets are expelled from the firepot, move the restrictor rod inwards until the flame slows down and no burning pellets are expelled. Another symptom of too much air is the heater “blowing the fire out” – a condition in which the pellets burn faster than they are fed (this is most common on low).



Large Stoves/Inserts Restrictor Setting Instruction

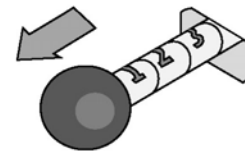
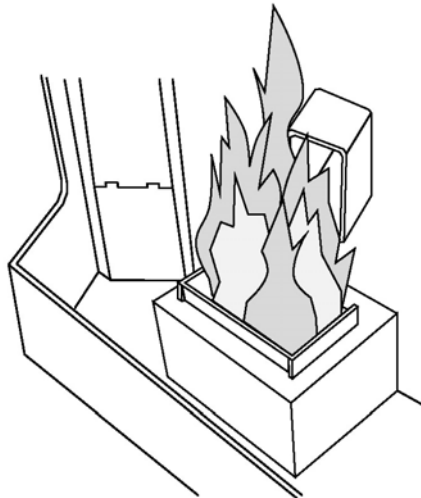
Restrictor Adjustment

The exhaust restrictor “fine tunes” your appliance, ensuring it pulls the correct amount of air through the firebox. Altitude, vent configuration, and other factors make restrictor adjustment necessary for every installation.

NOTE: the optimal restrictor position will vary over time as soot builds up inside the exhaust system – make sure the homeowner knows how to visually inspect the flame and adjust the restrictor.

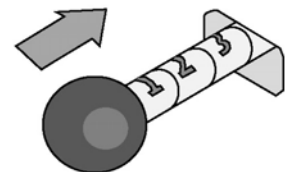
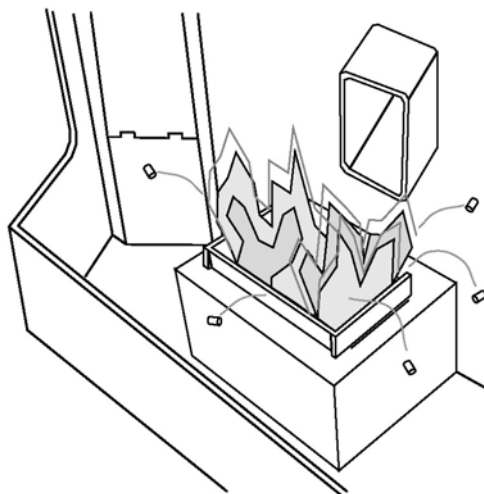
Not Enough Air:

If clinkers develop or the flame appears lazy and slow to blow the ash out of the firepot, pull the restrictor outward until the flame becomes active and the firepot holes remain clean. **NOTE:** If the restrictor is fully out (“5”), yet the firepot does not remain clean, the stove needs to be cleaned and checked for air leaks (see “Maintenance” section of this manual).



Too Much Air:

If the flames are too active (small, flickering flames) or if burning pellets are expelled from the firepot, move the restrictor rod inwards until the flame slows down and no burning pellets are expelled. Another symptom of too much air is the heater “blowing the fire out” – a condition in which the pellets burn faster than they are fed (this is most common on low).








Restrictor Adjustment

- The appliance should be fully up to temperature (15-20 Min.) before attempting adjustment.
- Turn the appliance to low.
- Watch the burn pot activity to determine need for adjustment.
- Adjust as necessary.
- Turn heat setting to high to verify it operates well on this setting.

AIR FLOW INTO THE BURN POT	
SHOULD	SHOULD NOT
Be strong enough to create complete burning of the pellets	Burn so slow that incoming pellets smother the fire
Be strong enough to blow ash out of the burn pot	Let excessive amounts of ash lie in the burn pot
	Blow unburned pellets out of the burn pot

Pellet Stove Restrictor Setting

CONDITION	More Restriction of Air Flow (Too Much Air)	Less Restriction of Air Flow (Too Little Air)
Stove goes out on low burn		
Unburnt pellets are blowing out of burn pot		
Fly ash remains in the burn pot		
Pellets smother the fire		
Stove works fine during day but at night goes out leaving an unburnt pile of pellets (Due to cooler night temperature, draft in vent increases)		

Pellet Stove Maintenance

DAILY	Bi-Weekly or Every 10 Bags of Pellets	Annually or Every Two Tons of Pellets
<ul style="list-style-type: none"> • Inspect burn for proper attributes of proper color and no excessive build up of pellets. • Check firepot for clinkers and clean as necessary. 	<ul style="list-style-type: none"> • Clean heat exchange tubes with built-in rake. • Vacuum out hopper (let pellets run out) to remove all fines and debris. • Cleaning of plated surfaces - CAUTION: follow instructions to prevent damage to the plating. • Check ashbox (all inserts) and empty as necessary. • Check ash pan - empty as necessary. • Clean the glass with a nonabrasive cleaner. • Open ash dump and sweep ash into ashpan (all stoves). 	<ul style="list-style-type: none"> • Remove fireback and clean vertical exhaust duct. • Open access panel on each side and clean the horizontal exhaust duct. • Remove exhaust blower and clean exhaust duct, blower housing and blower fan. • Clean the vacuum hose barbed connection. • Remove auger cover and vacuum out auger flight. • Remove auger and clean lower auger bearing. • Remove convection blower and clean. • Clean pellet vent. • Check gasketing and replace as necessary <ul style="list-style-type: none"> - Door Gasket - Side Access Panel Cover Gasket - Blower and Blower Housing Gasket - Ash Pan Gasket • Door closure and adjust as necessary. • Check glass door air wash openings and clean as necessary

TRAVIS INDUSTRIES PELLET PRODUCTS



Pellet Appliance Annual Service Procedure

Name _____ Phone # _____
 Address _____
 City _____ State _____ Zip _____
 Appliance Brand _____ Model _____

Check Procedure	✓	Comments Corrections or Recommendations
Check Clearance to Combustibles		
Check Vent for Blockage, Soot or Ash		
Check Outside Air for Blockage		
Clean Vertical Exhaust		
Clean Fire Back		
Clean Burn Pot		
Clean Heat Exchanger Tubes		
Take Apart and Clean Exhaust Blower		
Remove and Clean Convection Blower		
Dust/Vacuum Inner Appliance Body		
Clean Ash Traps and Ash Pans		
Clean Glass		
Check Door Gasket & Glass Gasket		
Check Ashpan Gasket		
Check Horizontal Side Cover Gaskets		
Check Exhaust Blower Gasket		
Cycle Unit and Check Control Board, Auger Motor, Snap Discs and Flow Switch		
Check Convection Blower Turn Up/Down		
Check Feed Rate Turn Up/Down		
Check Wall Trim Seal		
Check Roof Flashing Seal		
Remove Log & Clean		
Check Thermostat Operation		
Check Remote Operation & Replace Batteries		
Check Door Alignment		
Pellet Hopper Lid, Operation		
Finish/Looks Touch-Up		
Clean Hopper/Check for Pellets		