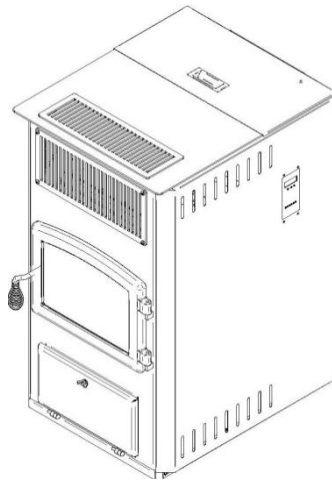




ECO - 65



OWNER'S MANUAL


- **Warning:** If your appliance is not properly installed a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation inspection requirements in your area. These authorities should be consulted to determine if there is a need to obtain a permit.
- **PLEASE** read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, body injury, or even death.
- **Save these instructions.**
- **Some surfaces become hot at higher feeding rates.** To prevent potential burns, avoid contact with those areas.
- **This heating unit must serve as a supplementary heat source.** An alternative heat source should be available in the home if needed. The manufacturer cannot be responsible for additional heating costs associated with the use of an alternative heat source.
- **It is highly recommended that the user buys this product from a retailer who can provide installation and maintenance advices.**

PROFESSIONAL INSTALLATION IS HIGHLY RECOMMENDED



OMNI-Test Laboratories, Inc.

Manufactured by:
Stove Builder International Inc.
St-Augustin-de-Desmaures (Quebec)
CANADA

45433A
25/10/2010 

INTRODUCTION

Thank you for purchasing the ECO-65 pellet stove. You are now prepared to burn pellet in the most efficient, convenient way possible. To achieve the safest, most efficient and most enjoyable performance from your stove, you must do three things: **1)** Install it properly; **2)** Operate it correctly; and **3)** Maintain it regularly. The purpose of this manual is to help you do all three.

PLEASE read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury or even death.

Keep this manual handy for future reference.

Your Drolet ECO-65 has been independently tested to ASTM E1509-04 Standard Specification for Room Heaters, Pellet Fuel Burning Type, UL 1482-2010 and ULC-S627-00 Standard for Solid Fuel Room Heaters, Oregon Administrative Rules for Mobile Homes (814-23-900 through 814-23-909) and Installation as a Stove Heater.

This pellet stove, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70 and CSA-C22.1*.

The bottom-feed burner system of this appliance is designed and tested specifically for use only with four different types of pellets: standard wood pellets, 100% bark pellets, sawdust/hay mix pellets, and switch grass pellets. This appliance is designed for residential installation according to current national and local building codes as a freestanding room heater. It is also approved as a mobile home heater. An outside combustion air source is mandatory.

The stove will not operate using natural draft or without a power source for the blower systems and fuel feed system and must not be burned with any type of coal.

This stove is designed to provide the optimum proportions of fuel and air to the fire in order to burn free of smoke and soot. Any blockage of the air supply to or from the stove will seriously degrade its performance and will be evidenced by a smoking exhaust and a sooting window. For best operation, the ash content of the pellet fuel should be less than 1% and the calorific value approximately 8,200 BTU/LB. Others fuels with a high ash content will require a higher levels of maintenance and cleaning.

Commercial and industrial installations of the Drolet ECO-65 should not be used since operational control is often not well managed in these settings.

SAFETY PRECAUTIONS



● DO NOT OPERATE YOUR STOVE IF YOU SMELL SMOKE COMING FROM IT. TURN IT OFF, MONITOR IT, AND CALL YOUR DEALER.



● NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, GARBAGE, NAPHTA, ENGINE OIL OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS STOVE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE STOVE WHILE IN USE.



● NEVER BLOCK FREE AIRFLOW THROUGH THE OPEN VENTS OF THE STOVE.



● NEVER TRY TO REPAIR OR REPLACE ANY PART OF THE STOVE UNLESS INSTRUCTIONS ARE GIVEN IN THIS MANUAL. ALL OTHER WORK SHOULD BE DONE BY A TRAINED TECHNICIAN.



● THE STOVE WILL NOT OPERATE DURING A POWER OUTAGE. IF AN OUTAGE DOES OCCUR, CHECK THE STOVE FOR SMOKE SPILLAGE AND OPEN A WINDOW IF ANY SMOKE SPILLS INTO THE ROOM.



● DISCONNECT THE POWER CORD BEFORE PERFORMING ANY MAINTENANCE OR REPAIRS ON THE STOVE.
NOTE: TURNING THE STOVE "OFF" DOES NOT DISCONNECT ALL POWER FROM THE STOVE.



● DO NOT UNPLUG THE STOVE IF YOU SUSPECT A MALFUNCTION. TURN THE STOVE OFF, PERIODICALLY INSPECT IT, AND CALL YOUR DEALER.



● CONTACT YOUR LOCAL BUILDING OFFICIALS TO OBTAIN A PERMIT AND INFORMATION ON ANY INSTALLATION RESTRICTIONS OR INSPECTION REQUIREMENTS IN YOUR AREA. NOTIFY YOUR INSURANCE COMPANY OF THIS STOVE AS WELL.



● KEEP FOREIGN OBJECTS OUT OF THE HOPPER.



● DO NOT THROW THIS MANUAL AWAY. THIS MANUAL HAS IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS THAT YOU WILL NEED AT A LATER TIME. ALWAYS FOLLOW THE INSTRUCTIONS IN THIS MANUAL.



● DO NOT PLACE CLOTHING, FURNITURES OR OTHER FLAMMABLE ITEMS ON OR NEAR THE STOVE.



● THE VIEWING DOOR MUST BE CLOSED AND LATCHED DURING OPERATION.



● DO NOT OPERATE THE STOVE IF THE FLAME BECOMES DARK AND SOOTY OR IF THE BURN POT OVERFILLS WITH PELLETS. TURN THE STOVE OFF, PERIODICALLY INSPECT IT, AND CALL YOUR DEALER.



● DO NOT TOUCH THE HOT SURFACES OF THE HEATER. CONTACT WITH UNIT MAY CAUSE SKIN BURNS. KEEP CHILDREN AWAY FROM THE UNIT AND EDUCATE ALL CHILDREN OF THE DANGER OF A HIGH TEMPERATURE STOVE. YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE STOVE.



● IT IS RECOMMENDED THAT THE STOVE BE UNPLUGGED WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME (I.E. DURING THE SUMMER MONTHS). IF THE STOVE IS INSTALLED IN A ROOM WITHOUT AIR CONDITIONING, OR IN AN AREA WHERE DIRECT SUNLIGHT CAN SHINE ON THE UNIT, IT IS POSSIBLE THIS CAN CAUSE THE TEMPERATURE OF THE STOVE TO RISE TO OPERATIONAL LEVELS; ONE OF THE SENSORS COULD THEN MAKE THE BLOWERS START ON THEIR OWN.



● THE EXHAUST SYSTEM MUST BE COMPLETELY AIRTIGHT AND PROPERLY INSTALLED. ALL VENT CONNECTOR JOINTS MUST BE SEALED AND FASTENED IN ACCORDANCE WITH THE PELLET PIPE MANUFACTURER'S INSTRUCTIONS TO ENSURE CONSISTENT PERFORMANCE AND AVOID SMOKE AND ASH SPILLAGE.



● THIS UNIT MUST BE PROPERLY INSTALLED TO PREVENT THE POSSIBILITY OF A HOUSE FIRE. THE INSTRUCTIONS MUST BE STRICTLY ADHERED TO. DO NOT USE MAKESHIFT METHODS OR COMPROMISE IN THE INSTALLATION.



● YOUR STOVE REQUIRES PERIODIC MAINTENANCE AND CLEANING. FAILURE TO MAINTAIN YOUR STOVE MAY LEAD TO SMOKE SPILLAGE IN YOUR HOME.



● ALLOW THE STOVE TO COOL BEFORE CARRYING OUT ANY MAINTENANCE OR CLEANING. ASHES MUST BE DISPOSED IN A METAL CONTAINER WITH A TIGHT LID AND PLACED ON A NON COMBUSTIBLE SURFACE WELL AWAY FROM THE HOME STRUCTURE.



● THIS APPLIANCE IS DESIGNED AND TESTED SPECIFICALLY FOR USE ONLY WITH FOUR DIFFERENT TYPES OF PELLETS: STANDARD WOOD PELLETS, 100% BARK PELLETS, SAWDUST/HAY MIX PELLETS, AND SWITCH GRASS PELLETS. ANY OTHER TYPE OF FUEL BURNED IN THIS HEATER WILL VOID THE WARRANTY AND SAFETY LISTING.



● THIS STOVE MUST BE CONNECTED TO A STANDARD 120 V., 60 HZ GROUNDED ELECTRICAL OUTLET. DO NOT USE AN ADAPTER PLUG OR SEVER THE GROUNDING PLUG. DO NOT ROUTE THE ELECTRICAL CORD UNDERNEATH, IN FRONT OF, OR OVER THE STOVE.



● THE STOVE MUST BE BOLTED TO THE FLOOR, HAVE OUTSIDE AIR, AND NOT BE INSTALLED IN A BEDROOM (PER H.U.D. REQUIREMENTS). CHECK WITH LOCAL BUILDING OFFICIALS.



● THE EXHAUST SYSTEM SHOULD BE CHECKED, AT LEAST TWICE A YEAR FOR ANY BUILD UP OF SOOT OR CREOSOTE.



● STOVE BUILDER INTERNATIONAL INC. GRANTS NO WARRANTY, IMPLIED OR STATED, FOR THE INSTALLATION OR MAINTENANCE OF YOUR STOVE, AND ASSUMES NO RESPONSIBILITY OF ANY CONSEQUENTIAL DAMAGE(S).



● THIS STOVE MUST ALWAYS BE CONNECTED TO A 4" FRESH AIR INLET.

REGISTER YOUR WARRANTY ONLINE

To receive full warranty coverage, you will need to show evidence of the date you purchased your stove. Keep your sales invoice. We also recommend that you register your warranty online at www.drolet.ca

Registering your warranty online will help us track rapidly the information we need on your stove.

TABLE OF CONTENTS

SAFETY PRECAUTIONS	3
1. INSTALLATION	7
1.1. FEATURES	7
1.2. PREPARATION	7
1.3. CLEARANCES	7
1.4. COMBUSTION AIR SUPPLY	8
1.5. ANCHOR THE STOVE	10
1.6. VENTING.....	10
1.6.1. Equivalent Vent Length (EVL).....	11
1.6.2. Installation Configurations.....	11
a) Horizontally through wall	11
b) Vertically with new chimney system	13
c) Vertically into existing chimney system	14
d) Vertically into existing masonry fireplace	15
e) Installation through side of masonry chimney	15
2. OPERATION	17
2.1. PROPER FUEL.....	17
2.2. WHERE TO STORE BAGS OF PELLETS.....	17
2.3. PRE-START-UP CHECK.....	17
2.4. BUILDING A FIRE	17
2.5. LIGHTING PROCEDURE	18
2.6. UNIT CONTROLS (See Figure 16).....	18
2.7. OPENING DOOR	19
2.8. CONVECTION BLOWER (ROOM AIR FAN).....	19
2.9. IF THE STOVE RUNS OUT OF PELLETS.....	19
2.10. REFUELING.....	20
2.11. SHUTDOWN PROCEDURE	20
2.12. SAFETY FEATURES.....	20
2.13. OPERATING THE STOVE USING A THERMOSTAT	20
2.13.1. Thermostat Installation	20
2.13.2. Thermostatic mode	21
2.14. OPERATING SAFETY PRECAUTIONS	22
3. MAINTENANCE	24
3.1. CLEANING THE BURN POT	24
3.2. MAINTENANCE OF THE EXCHANGERS AND BLOWER HOUSING	24
3.3. VENTING SYSTEM MAINTENANCE.....	25
3.3.1. Dealing with a Chimney Fire	25
3.3.2. Soot and Flyash – Formation and need for removal	26
3.4. ASH REMOVAL AND VACUUM USE.....	26
3.4.1. ASH DISPOSAL	26
3.5. DOOR ADJUSTMENT	27
3.6. DOOR GASKET MAINTENANCE	27
3.7. GLASS CARE.....	28
3.8. REMOVAL AND REPLACEMENT OF BROKEN DOOR GLASS	28
3.9. RECOMMENDED MAINTENANCE SCHEDULE.....	29

4.	TRoubleshooting Guide	30
5.	Electrical Diagram	36
5.1.	FUSE ACCESS.....	37
6.	REPLACEMENT PARTS.....	38
	APPENDIX A.....	39
	APPENDIX B.....	40



1. INSTALLATION

1.1. FEATURES

DROLET ECO-65 FREESTANDING PELLET STOVE

- Width: 24"
- Height: 41"
- Depth: 30"
- Weight: 375 lbs.
- Flue size: 4"
- Hopper Capacity: Up to 125 lbs. *(This can vary depending on pellet size, length, and diameter)*
- EPA status: < 4.5 g/h.
- Burn rate: 1.3 lbs to 7.9 lbs. per hour
- BTU range: 10,500 to 65,000
- Electrical consumption:
 - 5 Amps lighting cycle
 - 2.5 Amps. continuous duty
- Control board fuses: Main: 7.5A-250V fastblow
 - Convection blower: 5A-250V fastblow
 - Combustion blower: 3A-250V fastblow
 - Exhaust blower: 3A-250V fastblow
 - Auger 1: 3A-250V fastblow
 - Auger 2: 3A-250V fastblow
 - Ignitor : 5A-250V fastblow
- Electrical requirement: 120VAC 15A
- Approved installations: mobile home, conventional

1.2. PREPARATION

Factory packaging must be removed, and some minor assembly work is required prior to installation for handle and door adjustment. Also, the stove must be leveled using threaded legs.

1.3. CLEARANCES

The Drolet ECO-65 has been tested and listed for installation in residential and mobile home. (refer to figure 1 & 2)

FLOOR PROTECTION: minimum of 6" in the front and 6" on each side of the door opening. The stove must be placed on a continuous (grouted joints) noncombustible material such as ceramic tile, cement board, brick, 3/8" millboard or equivalent, or other approved or listed material suited for floor protection.

NOTE: ceramic tile, or any tile, requires a continuous sheet beneath to prevent the possibility of embers falling through to the combustible floor if cracks or separation should occur in the finished surface, this would include floor protection for Built-in raised hearths. Check local codes for approved alternatives.

Clearances are measured from the sides, back or face (door opening) (refer to fig. 3). For ceiling clearance refer to figure 4.

Clearances may only be reduced by means approved by the regulatory authority.

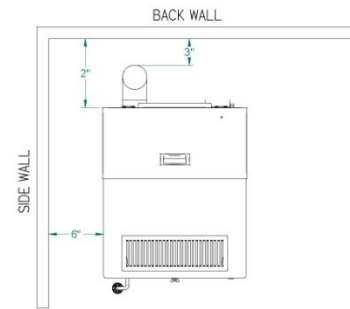


FIGURE 1
Back wall installation

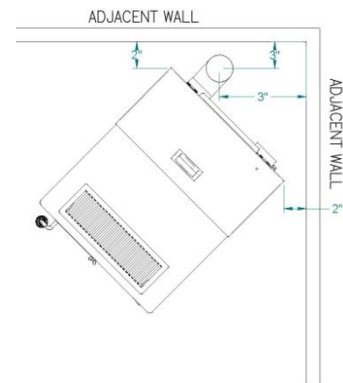


FIGURE 2
Corner installation

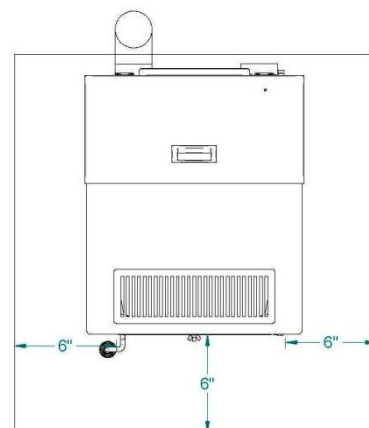


FIGURE 3
Floor protection

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

CAUTION: INSTALL VENT WITH CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

This heating unit must serve as a supplementary heat source. An alternative heat source should be available in the home if needed. The manufacturer cannot be responsible for additional heating costs associated with the use of an alternative heat source.

It is highly recommended that the user buys this product from a retailer who can provide installation and maintenance advices.

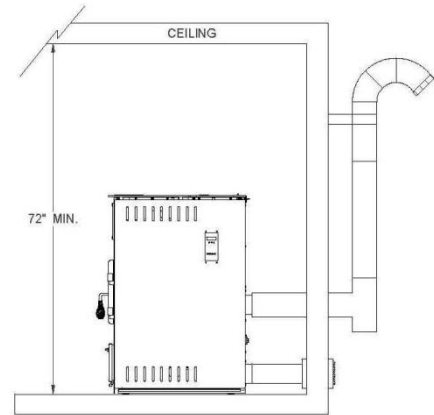


FIGURE 4
Ceiling clearance

1.4. COMBUSTION AIR SUPPLY

THE STOVE MUST BE CONNECTED TO AN OUTSIDE SOURCE OF COMBUSTION AIR.

A 4" inside diameter metallic pipe, either flexible or rigid, must be attached to the inlet at the stove's rear (refer to figures 5, 6 & 7). A rodent guard (minimum 1/4" wire mesh) must be used at the terminus (refer to figure 6). All connections must be secured and airtight by either using the appropriately sized hose clamp and/or UL-181-AP foil tape. Also make sure that the fresh air damper is open while the stove is running. The fresh air intake damper is located at the back of the stove right hand side (refer to figure 6.).

For mobile home installations only:

- No combustion air supply may exceed 10 feet.

Sources of Outside Combustion Air:

- A hole in floor near the back of the leading onto a ventilated crawl space under the house.
- A hole in the wall behind the stove.

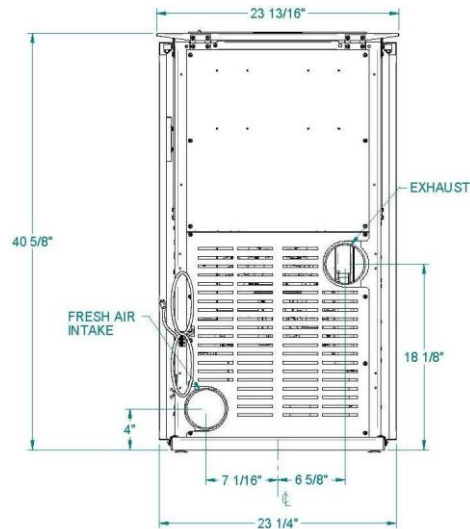


FIGURE 5
Rear view

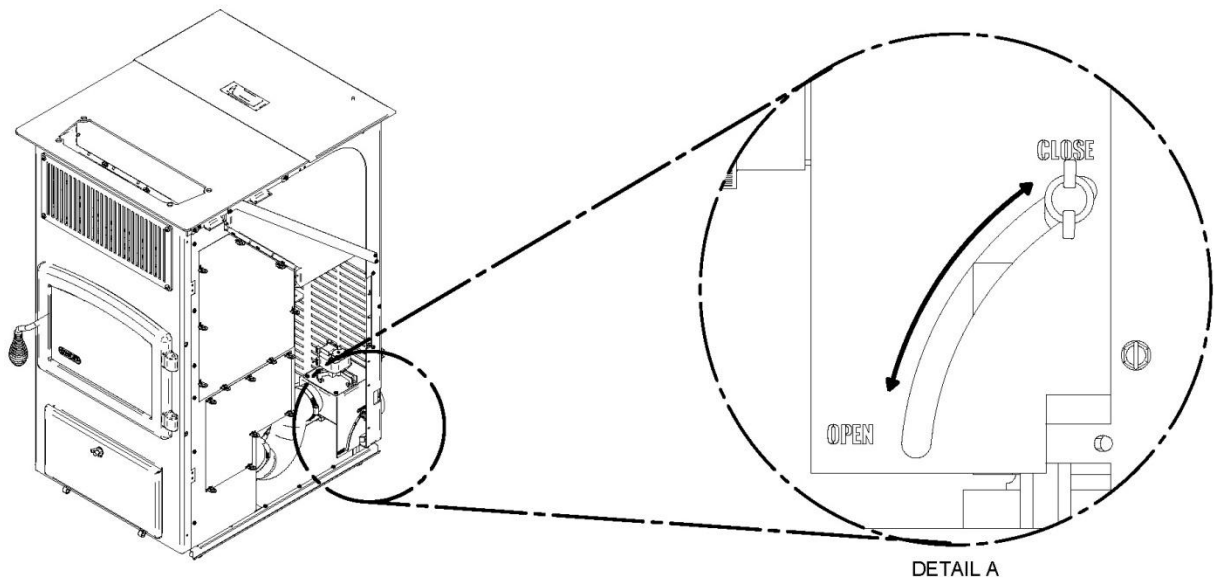


FIGURE 6.
The fresh air intake damper

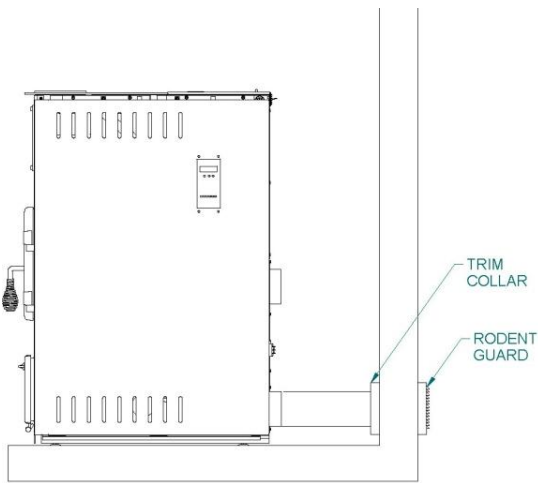


FIGURE 7
Fresh air supply

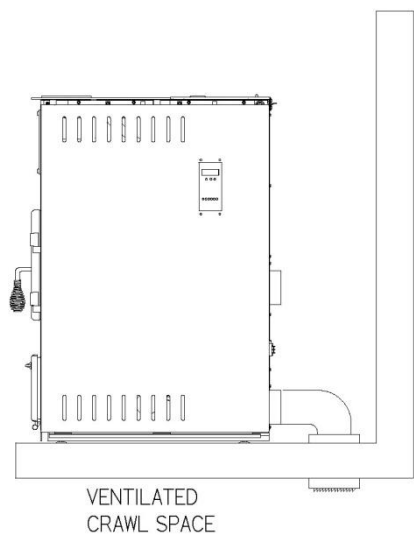


FIGURE 8
Fresh air supply

1.5. ANCHOR THE STOVE

The stove must be anchored to the floor with screws. Please use the two holes located on each side of the pedestal. (See Fig. 9)

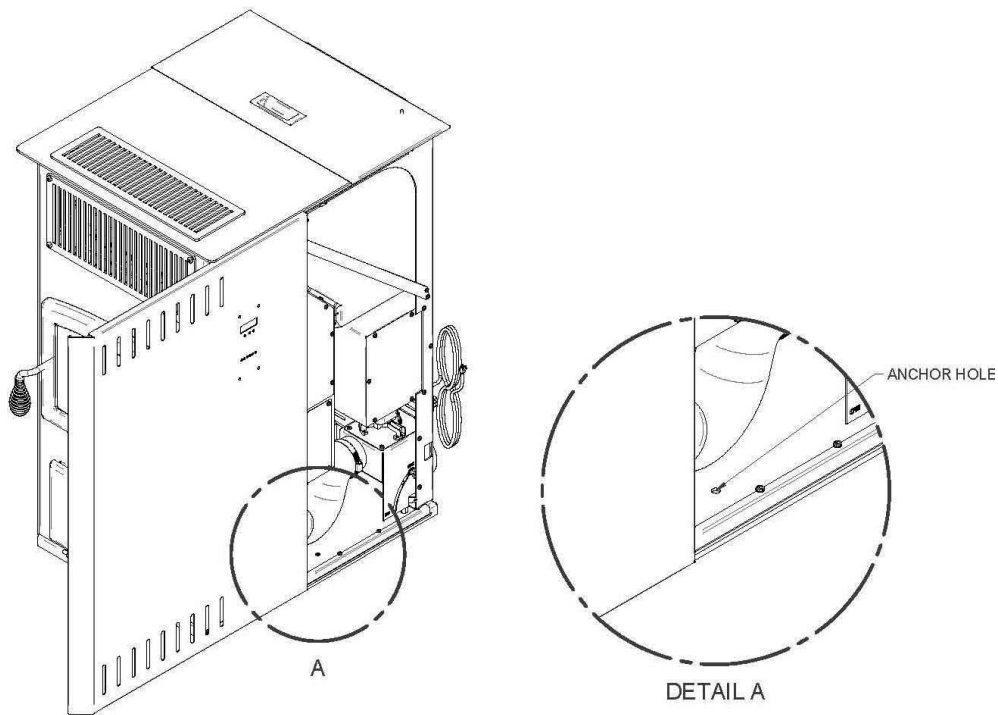


FIGURE 9
Anchor

1.6. VENTING

In Canada, we recommend that you use a listed pellet vent that meets the ULC S-609-M89/ORD C441-M90 Standard.

For the United States, we recommend that you use a listed pellet vent that meets the UL-641 Standard.

This unit can be vented in an existing factory-built or masonry chimney with the addition of a liner, provided the chimney is more than 4" in diameter. The liner should be listed and should meet the ULC S-635/640 standard in Canada and the UL-1777 standard in the USA. Refer to the instructions provided by the vent or chimney manufacturer, especially when passing through a wall, ceiling, or roof.

Your venting system should have at least one foot of vertical rise for each foot of horizontal run. The total vertical rise should never be less than 3 feet (see Appendix A).

This unit uses a pressurized exhaust system. All vent connector joints must be sealed and fastened. If vented horizontally, joints should be made gastight. Please consult the pellet pipe manufacturer's instruction to ensure proper installation and consistent performance to avoid smoke and ash spillage.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

WARNING: DO NOT INSTALL IN BEDROOM

CAUTION: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED

CAUTION: THE CHIMNEY CONNECTOR SHALL NOT PASS THROUGH AN ATTIC OR ROOF SPACE, CLOSET OR SIMILAR CONCEALED SPACE, OR A FLOOR, OR CEILING.

1.6.1. Equivalent Vent Length (EVL)

The longer the run of pipe in your installation, the greater the restriction in your system.

- Always use 4" pipe
- Horizontal runs shall not exceed 9 feet.
- Never exceed 30 feet of EVL.

To calculate EVL, use the following conversions table:

Qty	Type of pipe	EVL equivalent(ft)
1	90° elbow or "T"	5
1	45° elbow	3
1 ft	Horizontal pipe run	1
1 ft	Vertical pipe run	0.5

Here is an example on how to calculate the EVL of your installation. (See Figure 9):

$$(3 \times 4' \text{ of vertical length} = 12' \times 0.5 = 6 \text{ EVL}) +$$
$$(1 \times \text{elbow or "T"} = 5 \text{ EVL}) +$$
$$(2 \times 1' \text{ of horizontal length} = 2 \text{ EVL})$$

$$\text{Total EVL} = (6 + 5 + 2) = 13.$$

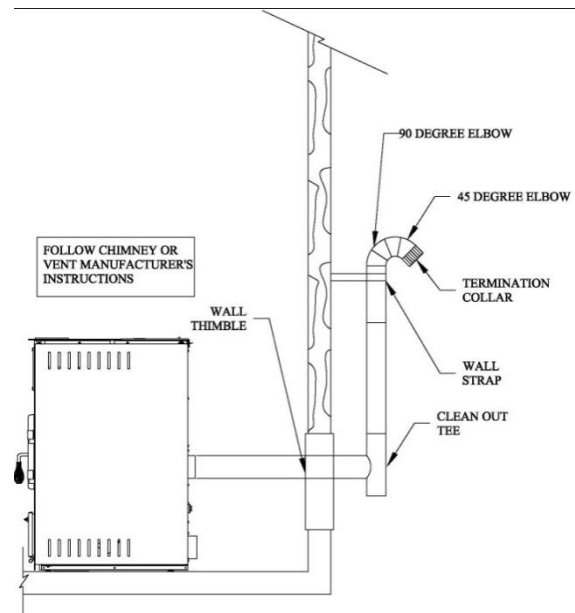


FIGURE 10
Venting through wall

1.6.2. Installation Configurations

a) HORIZONTALLY THROUGH WALL

(Refer to figures 10, 11, or 12)

NOTE: Follow vent chimney manufacturer's instructions.

1. Position stove, adhering to clearances shown in Figures 1 & 2.
2. Locate position of hole in wall; directly behind stove exhaust vent (refer to figure 5).
3. Always maintain 3" clearance from combustible materials.

4. Install Vent wall thimble per Vent manufacturer's instructions.
5. Attach enough piping to penetrate and extend at least 6 inches beyond the exterior wall. There should always be at least one foot of vertical rise for each foot of horizontal run (**see Appendix A**). At least 3 feet of vertical rise are needed in all cases. A longer vertical rise will favour a better exhaust.

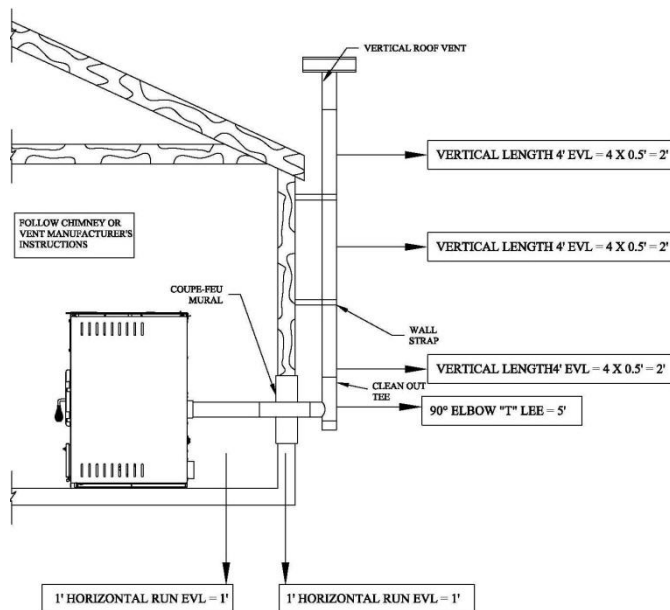


FIGURE 11
Venting through wall

6. To reduce the risk of smoke spillage, never terminate with a horizontal run. If your system terminates with a horizontal run, add at least 3 feet of vertical rise (**see Appendix A**).
7. Attach cap and seal outside wall thimbles with non-hardening waterproof mastic.

Termination should not be located so that hot exhaust gases can be a hazard to children. Exhaust gases can reach temperatures of 500°F and cause serious burns if touched.

Do not locate terminations:

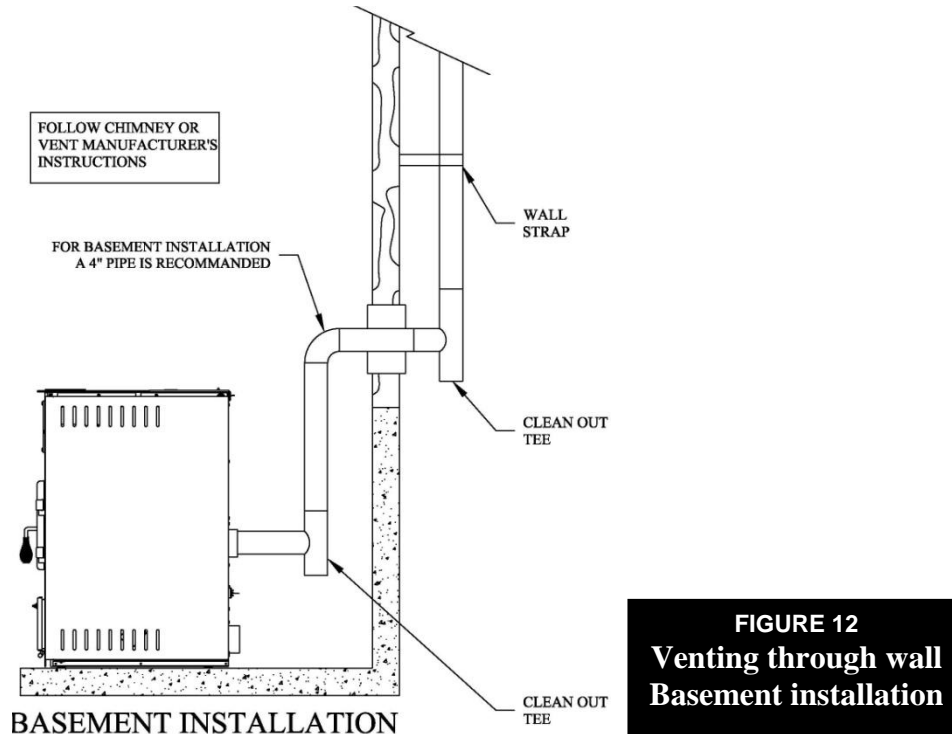
In Canada:

- a) less than 7 feet vertically above any public sidewalk, lane, street, right-of-way, stairway or landing;
- b) within 6 feet of a mechanical air supply inlet to a building;
- c) within 3 feet of a building opening or air inlet of another appliance;
- d) above a gas meter/regulator assembly within 3 feet horizontally of the vertical centerline of the regulator
- e) within 6 feet of any gas service regulator vent outlet or within 3 feet of an oil tank vent or an oil tank fill inlet;
- f) less than 1 feet above adjacent grade level or any adjacent surface that may support snow, ice, or debris;
- g) within 3 feet of the property boundary; and
- h) underneath a veranda, porch, or deck.
- i) A clear space of at least 3 feet shall be provided from the termination to any building projection, adjacent wall, or any combustible materials such as trees, shrubs, fencing, etc.

In the US:

- a) less than 3 feet above any forced air inlet located within 10 feet;
- b) less than 4 feet below or horizontally from, or one foot above, any door, window or gravity air inlet into any building;
- c) less than two feet from an adjacent building and not less than 7 feet above grade when located adjacent to a public walkway. Mobile home installations must use a spark arrester. Other restrictions may apply, such as the need to maintain a minimum distance to a gas meter. See NFPA 211.

CONSULT THE VENT MANUFACTURER'S INSTRUCTIONS.



b) VERTICALLY WITH NEW CHIMNEY SYSTEM
(Refer to Figure 13)

NOTE: Follow Vent chimney manufacturer's instructions.

OPTION: To achieve a centered vertical installation, a 45° elbow and a clean-out tee can be used to offset the pipe from the exhaust outlet to the rear center of the stove.

OPTION: Install Vent elbow in place of clean-out tee. Locate stove. Drop plumb bob to center of tee outlet, mark point on ceiling. Install ceiling support and Vent pipe per Vent manufacturer's instructions.

1. Always maintain 3" clearance from combustible materials. When passing through additional floors or ceilings, always install firestop spacer.
2. After lining up for hole in roof, cut either a round or square hole in roof, always 3" larger all the way around pipe. Install upper edge and sides of flashing under roofing materials, nail to the roof along upper edge. Do not nail lower edge. Seal nail heads with flexible waterproof sealant.
3. Apply flexible, waterproof sealant where the storm collar meets the vent. Slide storm collar down until it sits on the flashing. Seal and install cap. Mobile home installations must use a spark arrester.



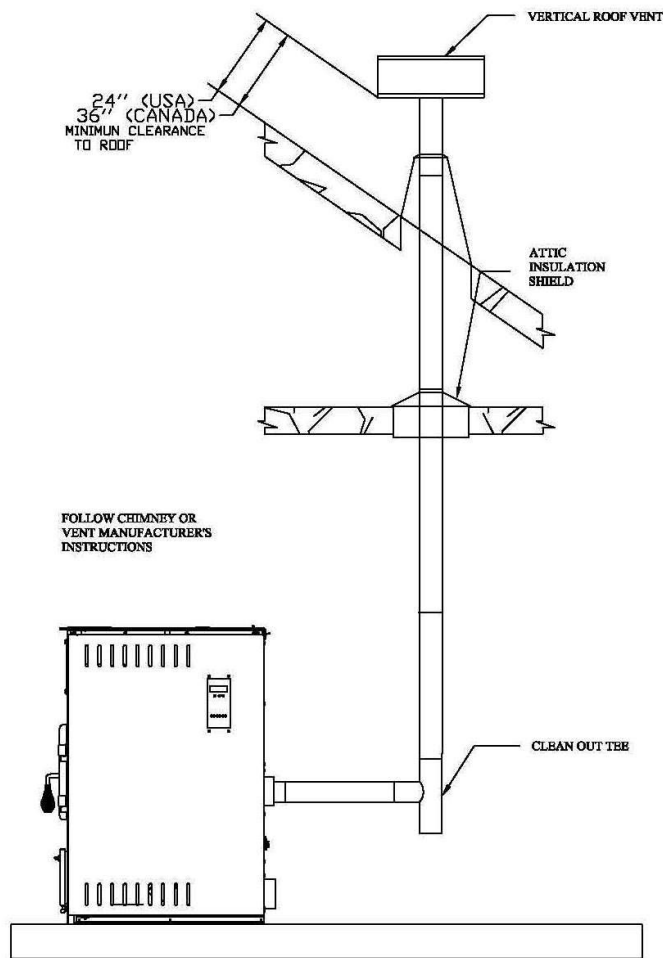


FIGURE 13
Venting through roof

c) VERTICALLY INTO EXISTING CHIMNEY SYSTEM
(Refer to Figure 14)

As an alternative, 4" Vent can be run inside existing chimney to termination (Figure 12). This is the preferred method.

Follow guidelines for equivalent vent length.

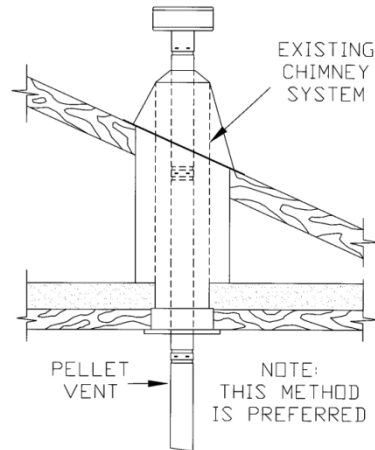


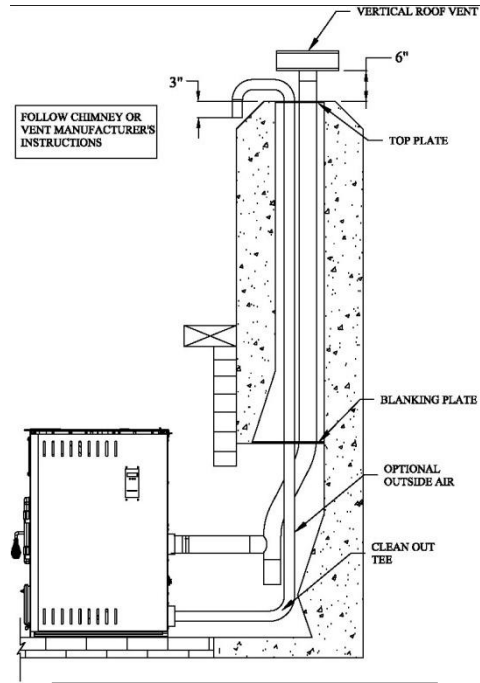
FIGURE 14
Venting through existing chimney

**d) VERTICALLY INTO EXISTING MASONRY
FIREPLACE**

(Refer to figure 15)

NOTE: Follow Vent chimney manufacturer's instructions.

1. Have the masonry chimney inspected by a qualified chimney sweep or installer to determine its structural condition.
2. You will need a pipe length equal to the chimney height from the hearth. If outside combustion air is to be used, you will need a pipe length equal to the chimney height plus 18 inches.
3. Install a blanking plate and the chimney pipe, and if used the outside air pipe, as shown in Figure 13.
4. Attach the adapter, a section of pipe and clean out tee, making sure the clean out tee is centered in the chimney flue area. Use RTV, metallic tape, and a minimum of three self-taping screws at all joint connections to ensure a tight seal.
5. Position the stove, adhering to the clearances in Figures 1 & 2.
6. Measure and build chimney top plate. Cut out holes for chimney pipe, and if used the outside air pipe. Install and seal with non-hardening mastic to prevent water leakage. Install vent cap.



**Figure 15
Venting through masonry
chimney**

e) INSTALLATION THROUGH SIDE OF MASONRY CHIMNEY

(Refer to figure 16)

NOTE: Follow Vent chimney manufacturer's instructions.

1. Position the stove, adhering to the clearances in Figures 1 & 2. Mark the center of the hole where the pipe is to pierce the masonry chimney.
2. It will be necessary to break out the masonry around the location of the pipe center mark. Use a 5-inch diameter hole for 4-inch pipe.
3. Measure and build chimney top plate. Cut out holes for chimney and the outside air pipe.
4. Install the tee on the bottom of the vertical pipe system and lower it down the chimney until the center branch of the tee is level with the center of the hole in the masonry, as shown in Figure 16.
5. Install and seal the top plate from step 3 with non-hardening mastic. Slip the storm collar over the pipe, and while holding the pipe at the proper elevation, affix the collar with a minimum of three ¼" stainless steel sheet metal screws. Seal all joints and seams around the collar.
6. Connect the horizontal pipe by pushing it through the hole in the masonry and lining it up with the branch in the tee. Push the pipe into the tee while twisting it to lock it into the tee.

7. If desired, once the horizontal pipe is in place, the space between the pipe and masonry may be filled with high-temperature grout.

Install the trim collar. An adjustable pipe length and adapter may be needed to finish the connection to the stove.

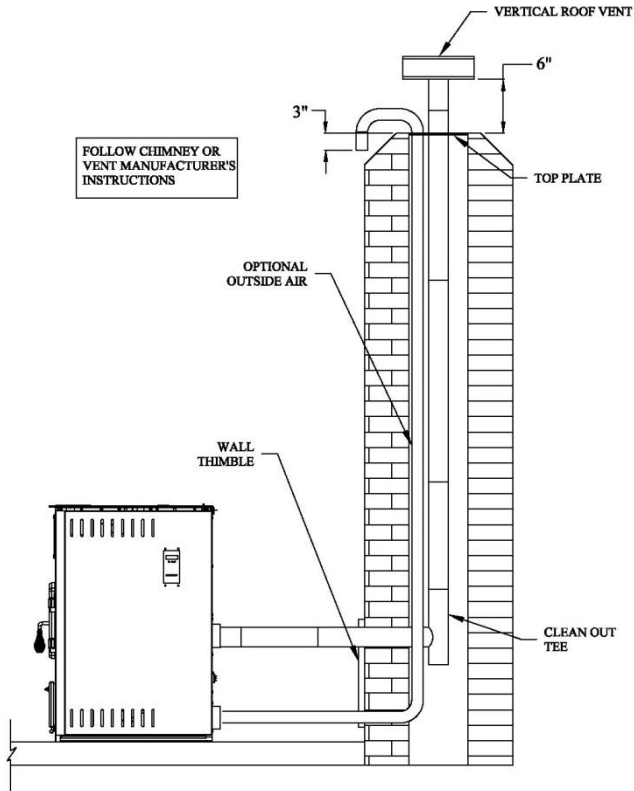


Figure 16
Venting through side of masonry chimney

2. OPERATION

2.1. PROPER FUEL

THIS STOVE IS APPROVED FOR BURNING four different types of pellets: standard wood pellets, 100% bark pellets, sawdust/hay mix pellets, and switch grass pellets! Each type of pellet has its properties and will burn differently.

The ash produced can also vary greatly. Factory-approved pellets are those ¼” or 5/16” in diameter and not over 1” long. Longer or thicker pellets sometimes bridge the auger flights, which prevents proper pellet feed. **Burning other types of pellets is not permitted. It will violate the building codes for which the stove has been approved and will void all warranties.** The different types of pellets that have been tested in the Drolet Eco-65 were made of the following types of biomass:

Wood pellets

Wood pellets, whether made of hard or soft wood, are easy to burn. The pellets used are the same type as the ones used in most pellet stoves. They should produce a fairly small amount of ash.

Wood and hay pellets

Pellets made of wood and hay will produce more ash than straight wood pellets. The wood and hay pellets that have been tested in your Eco-65 consisted of 1/3 hay and 2/3 wood. Make sure that any wood and hay pellets you put in your Eco-65 respect that mix (+/- 10%).

Bark pellets

100% bark pellets produce a hard crust that will be pushed into the ash drawer. Their ash content is very high. If you burn 100% bark pellets, make sure that the crust forming in front of the burn pot breaks and falls into the ash drawer. Ignition may be a bit more difficult and it is possible that the stove needs a second ignition cycle to properly light the bark pellets.

Switchgrass pellets

The ash content of switch grass pellets may vary depending on when this type of biomass is harvested. Switch grass will burn very clean. A crust will form in front of the burn pot. It should break easily and fall into the ash drawer. The crust is light and friable. It will occupy quite a bit of volume into the ash drawer. For this reason, if you are not present to empty the ash drawer, you should only fill 50% of the hopper.

2.2. WHERE TO STORE BAGS OF PELLETS

We recommend that you store your bags of pellets in a dry and well ventilated area if possible. Using dry pellets will increase the performance of your stove. You may want to have a bag or two in the same room as your stove for refuelling but make sure to respect the minimum clearances for combustible materials.

2.3. PRE-START-UP CHECK

Remove burn pot, making sure it is clean and none of the air holes are plugged. Clean the firebox, and then reinstall burn pot. Clean door glass if necessary (a dry cloth or paper towel is usually sufficient). Never use abrasive cleaners on the glass or door. Check fuel in the hopper, and refill if necessary. **Make sure that the fresh air inlet damper is open.**

2.4. BUILDING A FIRE

Never use a grate or other means of supporting the fuel. Use only the Drolet approved burn pot.

NOTE: During the first few fires, your stove will emit an odor and a small amount of fumes as the high temperature paint cures or becomes seasoned to the metal. Maintaining smaller fires will minimize this. Avoid placing items on stovetop during this period because paint could be affected. Make sure the room is well-ventilated. Open windows. **Odors and fumes released during this process are unpleasant but they are not toxic.**

2.5. LIGHTING PROCEDURE

- Fill hopper and clean burn pot.
- Press “MODE” button to select the desired setting “MANUAL” or “THERMOSTAT”
- Adjust feed rate to desired setting by pressing “-” or “+” button.

If fire doesn't start in 35 minutes, a warning code  will appear. Refer to troubleshooting section for more details.

2.6. UNIT CONTROLS (See Figure 16)

The blowers and automatic fuel supply are controlled from a panel on the right-hand side of the ECO-65. The control panel functions are as follows.



a. MODE SWITCH

- When the mode switch is pressed, you will be able to choose the Manual or the Thermostat mode, or to turn off the appliance. If the Manual mode is selected, the stove will automatically ignite. At this time, the heat level must be selected manually to adjust the stove's heat output to the desired level. If the thermostat mode is selected, the stove will automatically modulate between the lowest heat level and the heat level selected to keep the room temperature at the thermostat's setting. If the set room temperature is achieved while the stove has been running at the lowest heat level for more than 45 minutes, the unit will automatically shut off and will start another ignition cycle only when the thermostat calls for heat again. No fire starter is necessary to ignite the unit. The auger will feed fuel and the electronic igniter will start. If the unit doesn't ignite within 12 minutes, the stove will start another ignition cycle. If ignition fails a second time, a warning message will appear on the control panel.

- The Heat Level may be selected during the ignition cycle. However, the unit will only feed fuel at the desired heat level setting when the heat sensor located into the stove will receive a signal indicating that the unit has been fully ignited. This may take anywhere between 10 and 15 minutes.

b. FUEL FEED SWITCH

- When the “Fuel Feed” button is pushed the stove will feed pellets continuously into the burn pot during 1 minute.

CAUTION: THIS FUNCTION CAN ONLY BE OPERATED WHEN THE STOVE IS IN “OFF” POSITION. THE FUEL FEED SWITCH IS USED TO PRIME THE AUGER WHEN AUGER IS EMPTY.

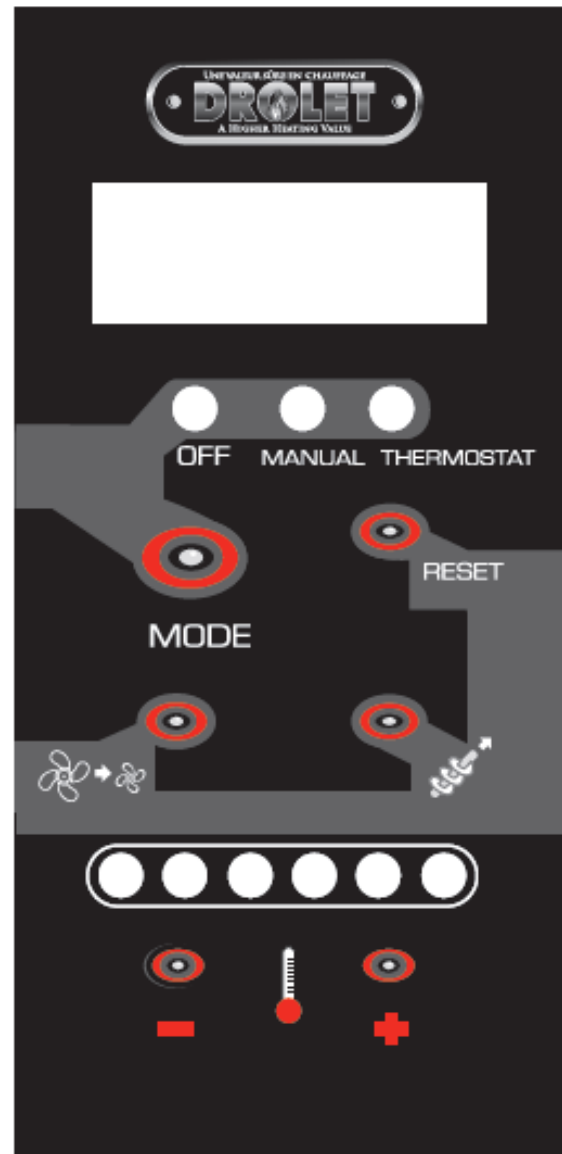
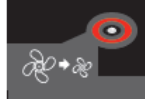


FIGURE 17
PC board



c. **CONVECTION BLOWER SPEED CONTROL**

- The convection blower speed varies directly with the fuel feed rate. Reducing the blower speed will also reduce the noise.
- When the “CONVECTION BLOWER SPEED CONTROL” button is pushed, the convection blower will switch to its lowest speed. The convection blower will remain at its lowest speed unless the stove reaches a certain temperature. If this occurs, the convection blower will go back to its highest setting to cool down the stove. The “CONVECTION BLOWER SPEED CONTROL” will have to be pushed again for the convection blower to go back to its lowest speed.



d. **HEAT LEVEL**

- By pressing “+” or “-”, you can set the pellet feed rate and hence the heat output of your stove. The levels of heat output will incrementally change and each LED indicates the level from 1 to 6.



e. **RESET**

Reset button has to be used to clear most warnings on the control and restart your stove.

2.7. OPENING DOOR

The door should be open only for maintenance purposes.


2.8. CONVECTION BLOWER (ROOM AIR FAN)

Upon starting your stove, the convection blower will not come on until the stove’s heat exchanger warms up. This usually takes about 10 to 15 minutes from start-up. Speed will vary with the selected feed rate, except if the “CONVECTION BLOWER SPEED CONTROL” mode has been activated.


2.9. IF THE STOVE RUNS OUT OF PELLETS

If the stove runs out of pellets, the fire goes out and the auger motors and blowers will run until the stove cools down. This will take a few minutes.

After the stove’s components stop running, a warning message will appear .

To restart, press the “RESET” button, refill the hopper, and press the “FUEL FEED” button  until pellets begin to fall into the burn pot. Press the “MODE” button to start the unit on Manual or Thermostatic mode.

2.10. REFUELING



We recommend that you do not let the hopper drop below ¼ full. If the reload lid stays open for more than 3 minutes, a warning  will appear. To restart, press the “RESET” button, and then press the “MODE” button to start the unit on Manual or Thermostatic mode.

KEEP HOPPER LID CLOSED AT ALL TIMES EXCEPT WHEN REFILLING. THE HOPPER MAY BE FILLED WHILE THE STOVE IS OPERATING. DO NOT OVERFILL HOPPER.

2.11. SHUTDOWN PROCEDURE

Turning your Drolet stove off is a matter of pressing the “MODE” control panel switch, until the “OFF” led goes on. The blowers will continue to operate until internal firebox temperatures has fallen to a preset level.

2.12. SAFETY FEATURES

- a. If the exhaust blower fails, the flue is blocked or a back draft occurred inside the flue, an air pressure switch will automatically shut down the auger and the combustion blower. Then, a warning message  will appear. This safety feature is to prevent the unit from burning fuel when the exhaust blower has failed, therefore preventing combustion fumes from spilling into the room.
- b. If the temperature in the auger rises beyond a certain acceptable level, a high temperature switch located on the auger housing will stop the fuel feed system and a warning  will appear.

CODE	BEFORE RESETTING	TO RESET
H	Heat exchanger and/or exhaust system is/are clogged. Refer to the owner's manual for maintenance procedures.	Press simultaneously for 2 seconds the mode and reset.
*** After 3 attempts, reset is no longer possible, call SBI technical support.		

2.13. OPERATING THE STOVE USING A THERMOSTAT

A thermostat may help you maintain a constant house temperature automatically. A millivolt thermostat is required. A fixed wall mount or hand held model can be used. The control panel can be set up three ways to operate your stove in thermostatic mode.

2.13.1. Thermostat Installation

- Unplug the stove from the power outlet.
- Connect two thermostat wires to the terminal block located on the lower right side of the back of the stove. To do so, loosen the two screws and insert the wires in the terminals. Tighten the two screws. (See figure 18)

The size of wires will vary with the distance:

DISTANCE	DIAMETER
20 ft	18GA
30 ft	16GA
40 ft	14GA
50 ft	12GA

- If you are using a wireless wall thermostat or a hand held thermostatic remote control, you can locate the receiver behind the stove's back panel, on the right end side, just below the terminal block. Most receivers are already equipped with quick-connect terminals. Simply unplug the PC board wires connected to the back of the terminal block and connect them directly with the receiver's terminals. Location of the thermostat is very important to obtain the best comfort and efficiency from your ECO-65. The thermostat should be mounted 50 inches from the floor on a wall located 15 to 20 feet from the stove. You should avoid an installation directly in front of the stove to avoid cycling. (See figure 19)

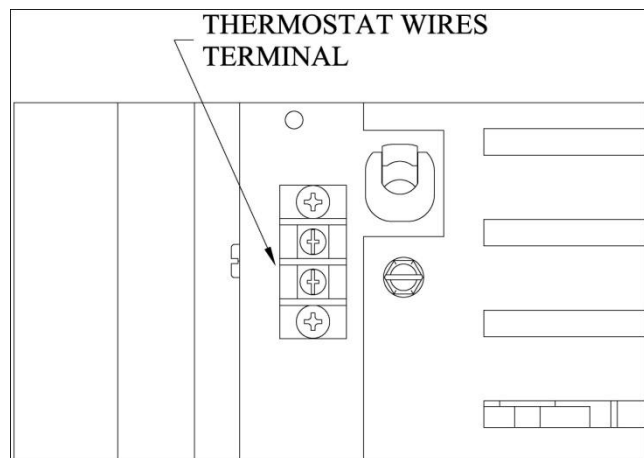


FIGURE 18
Rear view

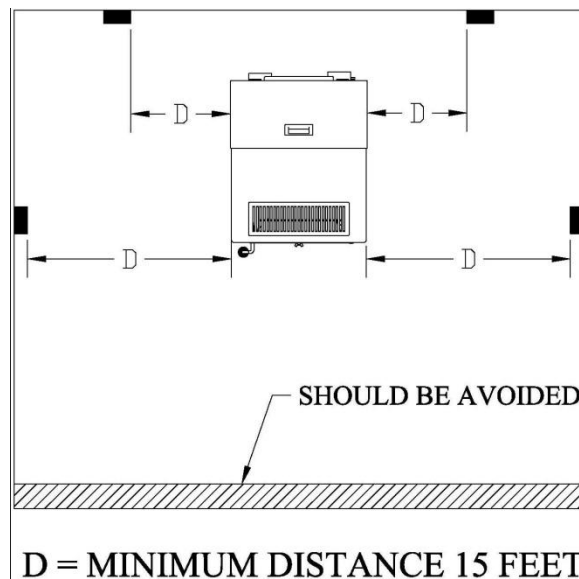


FIGURE 19
Thermostat location

2.13.2. Thermostatic mode

- To use this mode, the "MODE" button must be pushed to "Thermostat" upon starting the stove. The heat setting is then selected using the "Heat Level" selector "+ or -". When set in thermostatic mode, the stove will automatically run at the heat level selected until the set room temperature is reached. When that occurs, the stove will switch to heat setting #1 (lowest) until the thermostat calls for heat again. The convection blower will also slow to its lowest speed. When the thermostat calls for heat again, the stove will increase its feed rate to match the heat setting selected.

N.B.: If the room temperature remains stable and the thermostat does not call for heat during at least 45 minutes, the stove will shut down. When the thermostat calls for heat again, the stove will start an ignition cycle. Once the ignition cycle is completed, the stove will increase its feed rate to match the heat setting selected.

N.B.: It is possible to change the setting of your unit such that if the thermostat does not call for heat after 45 minutes, the unit will remain at the lowest heat setting (#1) but will not shut down (this is the PILOT ON mode). The stove will remain at the lowest heat level until the thermostat calls for heat again. It is also possible that the unit shuts down as soon as the thermostat stops calling for heat. This mode is called “PILOT OFF”. If you prefer that your unit runs following one of these logics, you need to change the setting to PILOT ON or PILOT OFF by simultaneously pressing the following two buttons on the PC Board for a couple of seconds:



Once you do that, the letters P, I, L, O, T, O, N will appear on the PC Board to let you know that you are in the “PILOT ON” mode. By pressing again the two buttons, the letters P, I, L, O, T, O, F, F will appear on the PC Board to let you know that you are in the “PILOT OFF” mode. If you wish to go back to the default thermostatic mode (i.e. the unit shuts down after 45 minutes if the thermostat does not call for heat), simply press the same two buttons again for a couple of seconds. The letters P, I, L, O, T, A, U, T, O will appear on the PC Board to let you know that you are in the “PILOT AUTO” mode.

NOTE: When in thermostatic mode:

YOU SHOULD NOT OPERATE THE MANUAL CONTROL OR PLAY WITH THE TEMPERATURE SETTING.

YOUR THERMOSTAT SHOULD BE INSTALLED BY AN AUTHORIZED DEALER OR SERVICE PERSON.

2.14. OPERATING SAFETY PRECAUTIONS

PLEASE READ THIS!

- a. **If you notice a smoldering fire** (burnpot full but no visible flame) **AND a heavy smoke buildup in the firebox, immediately TURN OFF the stove, but DO NOT unplug it. Do not open the door. Make sure that the fresh air damper is open and do not tamper with any controls on the stove.** Wait until smoke inside the firebox clears and blowers shut down. Do as instructed in “**PRE-START-UP CHECK**” and “**LIGHTING PROCEDURE**”, then attempt to restart the fire. If the problem persists, contact your dealer. Please note that smoke build-up during ignition may occur. Smoke can accumulate in the firebox for a few seconds just before the igniter is hot enough to fire-up the pellets in the burn pot. This is normal. As soon as there is fire in the burn pot, smoke will disappear.
- b. **DO NOT STORE OR USE FLAMMABLE LIQUIDS, ESPECIALLY GASOLINE, IN THE VICINITY OF YOUR DROLET STOVE. NEVER USE A GAS OR PROPANE TORCH, GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR FLUIDS TO START OR “FRESHEN UP” A FIRE IN THIS HEATER.**
- c. **WARNING: DO NOT OVERFIRE THIS STOVE.** This may cause serious damage to your stove and void your warranty. It also may create a fire hazard in your home. **IF ANY EXTERNAL PART OF THE UNIT BEGINS TO GLOW, YOU ARE OVERFIRING.** Immediately press the “MODE” switch on the control panel, until reaching the ‘OFF’ position. **DO NOT UNPLUG YOUR STOVE.** If you leave your house and your stove is not connected to a thermostat or a fresh air supply, do not leave it at the maximum setting. If the ambient air in a confined room becomes too hot, the stove may overheat and the thermal protection on the combustion motor, exhaust motor or auger motor may be activated. This will cause one of the motors to stop and a warning code may appear. Also, the thermistor may reach its maximum limit. If this happens, the stove will automatically reduce the feeding rate until the thermistor temperature has decreased.

- d. **KEEP ALL LOOSE OR MOVEABLE HOUSEHOLD COMBUSTIBLES, SUCH AS FURNITURE, DRAPES, TOYS, ETC. AT LEAST THREE FEET FROM THE OPERATING STOVE.**
- e. Maintain proper ventilation. It is important that adequate oxygen be supplied to the fire for the combustion process. During the winter season, make sure that the fresh air intake is free of any ice as this will starve the fire of air and prevent the proper operation of the stove. **YOUR STOVE HAS TO BE CONNECTED TO A 4" FRESH AIR KIT. Make sure that the fresh air intake damper is always fully open when the stove is burning.**
- f. The stove exhaust fan produces a negative pressure in the room. It draws air from the inside to the outside. In the same way, other appliances can also create a bigger negative pressure. In this case, as the air naturally flows from high pressure point to low pressure point, the bigger negative pressure may draw the smoke from the inside of the stove into the room. The stove can also affect other ventilation appliances, causing the same effect to them.
- g. Not following the instructions contents of his manual may cause smoke spillage into the room and other potential hazards. It is always recommended to install strategically placed smoke detectors and to have a fire extinguisher in a convenient location.
- h. Do not open the stove door when operating unless necessary. This will create a dirty, inefficient burn and could allow smoke spillage or sparks to escape.
- i. Do not open the ash drawer access panel when operating unless necessary. This will create a dirty, inefficient burn and could allow smoke spillage or sparks to escape.
- j. Do not permit operation by young children or those unfamiliar with stove's operation.
- k. **Do not service or clean this appliance without disconnecting the power cord.**
- l. If the stove is installed in a room without air conditioning, or in an area where direct sunlight can shine on the unit, it is possible this can cause the temperature of the stove to rise to operational levels; one of the sensors could then make the blowers start on their own. It is recommended that the stove be unplugged when not in use for extended periods of time (i.e. during the summer months).
- m. Burning any solid fuels generates carbon monoxide in low concentration. This gas is evacuated by the exhaust venting system. In higher concentrations, carbon monoxide is toxic and may cause death. To prevent this, ensure that your venting system is gastight.
- n. Use only approved fuels in this stove. Some other fuels may be highly volatile, which may cause more embers to enter the exhaust venting system causing a hazardous situation. Other fuels type, such as charcoal, can create a higher concentration of carbon monoxide leading to potential poisoning.

3. MAINTENANCE

FAILURE TO CLEAN AND MAINTAIN THIS UNIT AS INDICATED CAN RESULT IN POOR PERFORMANCE AND SAFETY HAZARDS. NEVER CLEAN WHEN HOT.

3.1. CLEANING THE BURN POT

The burn pot should be kept clean and its ports should not be clogged with combustion residues. Cleaning the burn pot is simple. To do so, you may use a scraper, a brush or release the clip in front of the burn pot. Then, remove the burn pot by pulling it. Once the burn pot is removed you should clean thoroughly inside the burn pot mount with a vacuum.

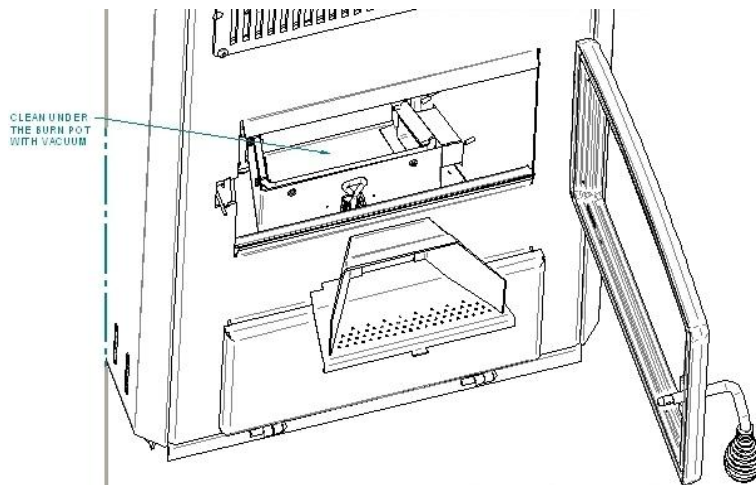


FIGURE 20
Burn Pot

NOTE: Inspect burn pot periodically to see that holes have not become plugged. If so, clean thoroughly.

3.2. MAINTENANCE OF THE EXCHANGERS AND BLOWER HOUSING

The exchangers should be inspected regularly during the burning season. Easy access is provided:

Before cleaning the heat exchanger, remove the decorative panel and the air jacket access panel located on the left hand side of the stove. Then, remove the three clean out traps to perform the maintenance. It is important to start from the top and finish at the bottom. Use a scraper and an ash vacuum to clean the heat exchanger. Using an ash vac will be the most efficient way to collect ashes that may have accumulated. Please note that you do not need to repeat the same steps on the right side of the appliance. The right hand side only needs to be cleaned if there is a lot of ash accumulated. Ashes may also accumulate on the inside tip of the pressure switch probe connector. Use a mesh pad or wire brush to clean the connector and blow inside the tube to make sure it is free of obstruction. One of the clean out traps will give you access to the blower housing. Be very careful not to damage the blower impellers when you clean the inside of the blower housing. Make sure that there isn't dirt build-up on the impeller. If there is, you can carefully remove it using your fingers. Finish by putting back all clean out traps and closing the air jacket. Should one of the clean out trap gaskets be damaged, it is very important that you replace it in order to prevent leakage of flue gases.

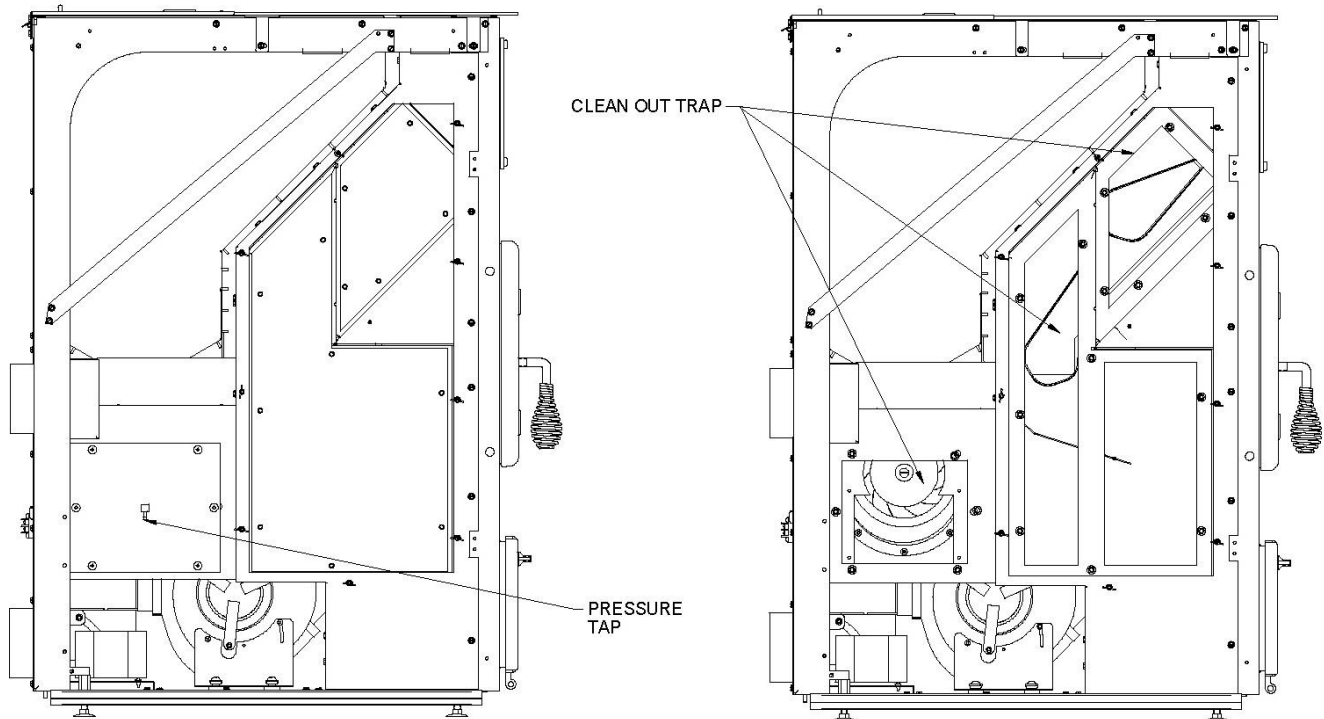


FIGURE 21
Clean out trap and Pressure tap
location

3.3. VENTING SYSTEM MAINTENANCE

REGULARLY EXAMINE THE FLUE PIPES, THE JOINTS, AND THE SEALING TRIMS TO ENSURE THAT THE SMOKE AND THE COMBUSTION GASES ARE NOT TRANSPORTED INTO THE AIR DUCTING SYSTEM.

The most efficient method to sweep the venting system is by using a 4-inch pellet brush. Brush downwards so ash, soot and creosote residues will come off the inner surface and fall at the bottom of the venting system where they can be removed easily. The chimney must be in good condition and kept clean.

If a significant layer of creosote has accumulated (3mm / 1/8" or more), it must be removed immediately to eliminate the risk of a chimney fire.

3.3.1. Dealing with a Chimney Fire

Regular chimney maintenance and inspection can prevent chimney fires. If you have a chimney fire, follow these steps:

1. Immediately turn off the stove;
2. Alert your family of the possible danger;
3. If you require assistance, alert your fire department;
4. If possible, use a dry chemical fire extinguisher, baking soda or sand to control the fire. Do not use water as it may cause a dangerous steam explosion;

5. Check outside to ensure that sparks and hot embers coming out of the chimney are not igniting the roof;
6. Do not use the stove again until your chimney and stove have been inspected by a qualified chimney sweep or a Fire Department Inspector;

CAUTION: CLEANOUT OF THE HEAT EXCHANGER, FLUE PIPE, AND CHIMNEY, IS ESPECIALLY IMPORTANT AT THE END OF THE HEATING SEASON TO MINIMIZE CORROSION DURING THE SUMMER MONTHS, CAUSED BY ACCUMULATED ASH.

3.3.2. Soot and Flyash – Formation and need for removal

The products of combustion will contain small particles of flyash. The flyash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once a year to determine if cleaning is necessary.

3.4. ASH REMOVAL AND VACUUM USE

In order to remove ashes from the ash drawer, simply unscrew the wing nut, open the access door, and empty the ash drawer.

Also, it is important that the door and the ash drawer be kept closed while the appliance is in use.

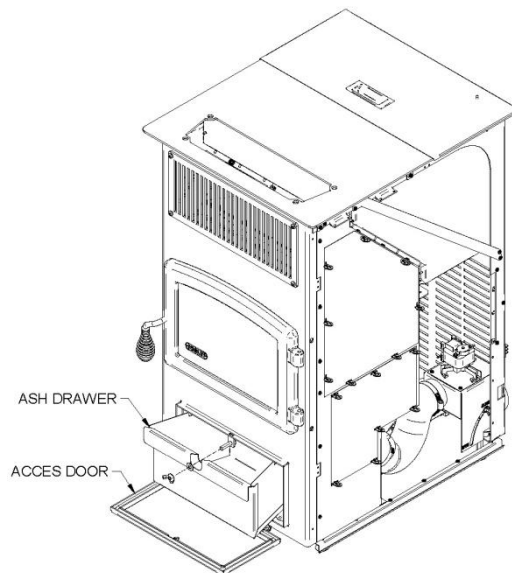


FIGURE 22
Ash Drawer

3.4.1. ASH DISPOSAL

Ashes must be placed in a metal container with a tight fitting lid. The closed container should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. This container should not receive any other type of waste. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

Once the ashes have been removed, you should take this opportunity to thoroughly vacuum around the ash drawer. We suggest using a vacuum designed for ashes. Some regular vacuums and shop vacs disperse ash into the room. Your vacuum or shop vac may have a special filter or bag available to eliminate this dispersion.

3.5. DOOR ADJUSTMENT

In order for your stove to operate properly, the door should be adjusted periodically to provide an air tight fit. To adjust:

- Remove the lock pin (spring pin) by pulling and turning it using pliers ("wise grip")
- Turn the handle counter clock wise one turn to increase pressure
- Re-install the lock pin (spring pin) with a small hammer

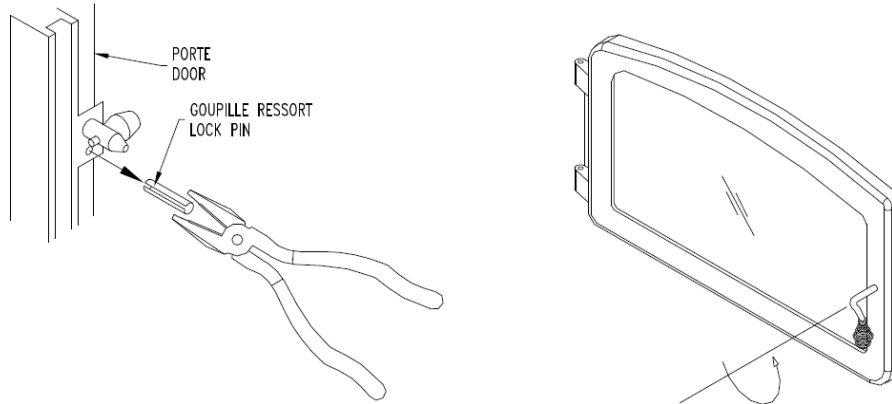


FIGURE 22

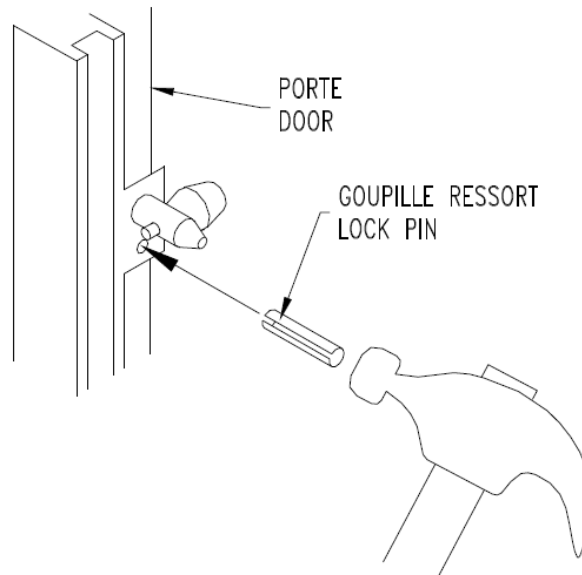


FIGURE 23

3.6. DOOR GASKET MAINTENANCE

It is important to maintain the door gasket in good condition. After a while, the gasket might sag; a door adjustment may then be required. If the door adjustment is not sufficient, replace the door gasket with a genuine one. **If the appliance door is not properly sealed, combustion gases may be dispersed into the room.**

3.7. GLASS CARE

Clean door glass as necessary. The use of a specialty designed cleaner is recommended. Your authorized Drolet dealer can also assist you to choose the right product. Regular household glass cleaners will not clean creosote.

WARNING: NEVER USE ABRASIVE CLEANERS ON THE GLASS OR DOOR.

WARNING: DO NOT CLEAN THE GLASS WHILE IT'S HOT.

WARNING: DO NOT ABUSE THE DOOR GLASS BY STRIKING, SLAMMING OR SIMILAR TRAUMA.

WARNING: DO NOT OPERATE THE STOVE WITH THE GLASS REMOVED, CRACKED OR BROKEN.

3.8. REMOVAL AND REPLACEMENT OF BROKEN DOOR GLASS

While wearing leather gloves (or any other gloves suitable for handling broken glass), carefully remove any loose pieces of glass from the doorframe. Dispose of all broken glass properly. Return the damaged door to your Drolet Dealer for repair or replacement.

The glass used for the ECO-65 is a high temperature ceramic glass (1400°F). If the glass breaks, it must be replaced with an identical ROBAX (ceramic glass) 5 mm thick with the dimensions : 10"5/32 x 14"21/32. Your authorized Drolet dealer can help you to obtain this genuine replacement part.

In order to replace the glass, follow this procedure;

1. Remove the door from the stove
2. Remove the 4 glass retainers (2, 3, 4, 5) held in place by the screws (1)
3. Remove the glass (6)

To install the new glass, follow the above steps in reverse order.

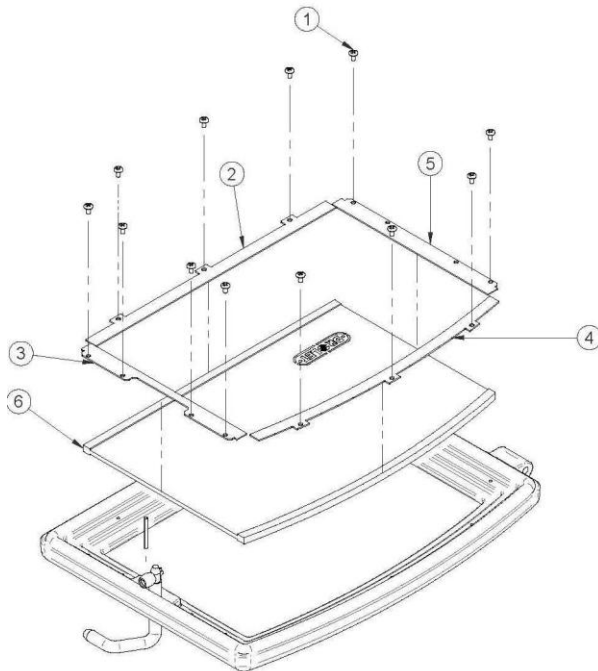


FIGURE 25

WARNING: REPLACEMENT GLASS SHOULD ONLY BE PURCHASED FROM A DROLET DEALER (SEE "REPLACEMENT PARTS", IN THE APPENDIX). TEMPERED GLASS OR ORDINARY GLASS WILL NOT WITHSTAND THE HIGH TEMPERATURES OF THE ECO-65.

3.9. RECOMMENDED MAINTENANCE SCHEDULE

Use this as a guide under average-use conditions.


Components	Weekly or after +/- 500 pounds	Twice a year or after +/- 2 tons	Annually or per 4 tons of pellets
Burn Pot	Brush / Vacuum		
Glass	Clean		
Heat Exchanger Tubes		Scrape and Vacuum*	
Exhaust Channels (through access traps)		Vacuum*	
Ash Drawer	Empty / Vacuum		
Combustion Chamber	Vacuum	Vacuum / Brush*	
Exhaust Blower		Vacuum*	
Combustion Blower		Vacuum*	
Pressure Switch Tap		Brush*	
Venting System		Inspect	Sweep
Gaskets		Inspect	
Hopper			Empty / Vacuum


*Cleaning frequency may vary depending on the type of fuel used. Fuel with higher ash content will increase cleaning frequency.


4. TROUBLESHOOTING GUIDE

When your stove acts up, your first reaction may be to call for help. This guide may save time and money by enabling you to solve simple problems yourself. Problems can be caused by only five factors: 1) poor fuel; 2) poor operation or maintenance; 3) poor installation; 4) component failure; 5) factory defect. You can usually solve the problems related to 1 and 2. Your dealer can solve problems relating to 3, 4 and 5. Refer to figures 24 - 27 to help locate indicated parts.


Should you need to contact your dealer or the manufacturer, please photocopy and fill out the form in Appendix B. Try to answer as many questions as you can. Have it handy when you call. This will help you obtain a much faster service.


	
STOVE SHUTS OFF AND APPEARS ON CONTROL BOARD	
Possible Causes:	Possible Remedies: (Unplug stove first when possible)
1. Airflow pressure switch hose or pressure tap for hose are blocked.	Unhook air hose from the airflow switch and blow through it. If air flows freely, the hose and tube are fine. If air will not flow through the hose, use a thin wire to clear the blockage.
2. The air inlet, burn pot, interior combustion air chambers, combustion blower, or exhaust pipe are blocked with ash or foreign material.	Follow all cleaning procedures in the maintenance section of the owner's manual.
3. Vent pipe is incorrectly installed.	Check to make sure vent pipe installation meets the criteria in the owner's manual as well as the pipe manufacturer's recommendations.
4. The airflow pressure switch wire connections are faulty.	Check the connectors attached to the pressure switch.
5. The airflow pressure switch wires are pulled loose at the connector on the wiring harness.	Check to see whether the wires are loose at the connectors.
6. Exhaust blower failure.	This blower must turn on when you start the unit. If it does not, make sure there is power on the connections. If the power is connected, the motor is probably defective; if there is no power, see #7.
7. Control board is not sending power to exhaust blower.	If there is no power going to the blower, check all connections. If all wires are properly connected, you have a defective control board.
8. Control board not sending power to airflow pressure switch.	There should be a 120-volt current going to the air switch after the stove has been on. You will need a technician to perform this test.
9. Airflow pressure switch has failed (very rare).	To test the airflow pressure switch, you need to disconnect the air hose from the blower casing. With the other end still attached to the switch, very gently suck on the loose end of the hose (you may want to completely disconnect the hose from the stove and the switch first and make sure it is clear). If you hear a click, the switch is working. Be careful: too much suction can damage the switch.


STOVE SHUTS OFF AND DISPLAYS WARNING CODE 	
<u>Possible Causes:</u>	<u>Possible Remedies:</u> (Unplug stove first when possible)
1. The hopper is out of pellets.	Refill the hopper.
2. The burn pot holes are blocked.	Remove the burn pot and clean it thoroughly.
3. The air inlet, interior chambers, or exhaust system is partly blocked.	Follow all cleaning procedures in the maintenance section of the owner's manual.
4. One of the two augers motor has failed.	Remove the auger motor from the auger shaft and try to run the motor separately by pressing the fuel feed button on the control board. Make sure that the hopper lid is not open. If the motor turns, the shaft is jammed on something. If the motor does not turn, the motor is defective or there is a faulty connection with the control board. To remove the auger motor, take the rear louver off the stove body. Loosen the two screws holding the motor to the auger shaft.
5. One of the two auger shaft is jammed.	Remove the auger shaft from the auger housing. Start by emptying the hopper. Take the rear louver off the stove body. Then take the auger motor off by removing the screws that hold the motor to the auger shaft. Once the motor is out, remove the four screws on the steel plate that holds the auger shaft to the auger housing. Then rotate the bottom end of the auger shaft down towards you until you can pull the shaft down out of the stove. After you have removed the shaft, inspect it for bent flights, burrs, or broken welds. Remove any foreign material that may have caused the jam. Also, check the auger housing for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam. Clean the auger housing thoroughly to remove all pellet dust.
6. The thermistor heat sensor has malfunctioned.	The thermistor is a heat sensor located on the exhaust housing. Its function is to tell the control board that the unit has ignited properly by measuring the heat in the exhaust. The pellet stove will not start feeding pellets at the desired heat setting until it has received a signal from the thermistor heat sensor. If the thermistor heat sensor is bad, the unit will stop after the ignition cycle. If this situation occurs, call your dealer or technician.

STOVE FEEDS PELLETS, BUT WILL NOT IGNITE AND  APPEARS ON THE CONTROL BOARD	
<u>Possible Causes:</u>	<u>Possible Remedies:</u>
1. Blockage in igniter tube or inlet for igniter tube.	Remove the burn pot and clean it thoroughly. Make sure that all openings are clear. Find the place where the igniter tube comes out of the burn pot housing. It is a small tube located on the back of the burn pot housing. Make sure it is clear. Make sure there is no debris around the igniter element or inside the igniter tube.
2. Defective igniter element.	Supply power directly to the igniter element. Watch the tip of the igniter from the front of the stove. After about 30 seconds, the tip should glow. If it does not, the element is defective and must be replaced. You may need a technician to perform this test.
3. The thermistor heat sensor has malfunctioned.	The thermistor is a heat sensor located on the exhaust housing. Its function is to tell the control board that the unit has ignited properly by measuring the heat in the exhaust. The pellet stove will not start feeding pellets at the desired heat setting until it has received a signal from the thermistor heat sensor. If the thermistor heat sensor is bad, the unit will stop after the ignition cycle. If this situation occurs, call your dealer or technician.


4. The control board is not sending power to the igniter.	Check the voltage going to the igniter during ignition. It should be a full current. If the voltage is lower than full current, check the wiring. If the wiring is functional and properly connected, the board is defective. You will need a technician to perform this test.
5. The pump is not connected properly or isn't working properly	Verify that the plug is connected properly and if the pump is running during the lightning cycle. If the pump isn't working make sure all connections are good.

 STOVE FEEDS PELLETS, BUT WILL NOT IGNITE AND APPEARS ON THE CONTROL BOARD	
<u>Possible Cause:</u>	<u>Possible Remedy:</u>
1. The igniter fuse on the control board has blown.	The igniter or the pump is defective or the wiring harness shorted. Remove the control board cover and check if the F1 fuse appears to have blown. Replace it with a 5 Amp 250V fuse. Plug the stove back on and try to start the unit.

 STOVE FEEDS PELLETS, BUT WILL NOT IGNITE AND APPEARS ON THE CONTROL BOARD	
<u>Possible Causes:</u>	<u>Possible Remedies:</u>
1. The auger jammed, the auger motor is defective or the wiring harness shorted.	Remove the control board cover and check if the F2 fuse appears to have blown. Replace it with a 3 Amp 250V fuse. Plug the stove back and try to run the unit.
2. The auger fuse has blown.	Start by emptying the hopper. Then, remove the auger motor by removing the screws holding the motor to the auger shaft. Once the motor is out, remove the four screws on the steel plate holding the auger shaft to the auger housing. Then, rotate the bottom end of the auger shaft down towards you until you can pull the shaft down out of the stove. After you have removed the shaft, inspect it for bent flights, burrs, or broken welds. Remove any foreign material that might have caused the jam. Also, check the auger housing for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam. Clean the auger housing thoroughly to remove all pellet dust. Repeat the process with the burn pot auger motor.

 STOVE STOPS FEEDING PELLETS AND APPEARS ON THE CONTROL BOARD	
<u>Possible Cause:</u>	<u>Possible Remedy:</u>
1. An overheat zone was detected on the auger housing	The L-250 automatic high temperature switch is located on the top of the auger housing. It sends a signal to the control board if the auger housing overheats. Wait until the stove cools down AND THEN INSPECT YOUR UNIT. Improper installation, poor maintenance, or a defective or missing component may be causing the stove to overheat. Reset the stove and restart it. Call a technician if you get this code again.

*** After 3 attempts, reset is no longer possible, call SBI technical support.


STOVE STOPS FEEDING PELLETS AND  APPEARS ON THE CONTROL BOARD	
<u>Possible Cause:</u>	<u>Possible Remedy:</u>
1. The hopper lid has stayed open for more than 3 minutes	<p>As a security measure, the auger stops turning and feeding pellets as soon as the hopper lid opens. It will resume normal operation as soon as the hopper lid is closed. If the hopper lid stays open for more than 3 minutes, the unit will stop and a code "d" will appear on the control board. Close the hopper lid. Reset the unit and start it again.</p> <p>If the lid is properly close the hopper lid switch is defective or misconnected</p>

SMOKE SMELL COMING BACK INTO THE HOME	
<u>Possible Causes:</u>	<u>Possible Remedies:</u>
1. There is a leak in the vent pipe system.	Inspect all vent pipe connections. This is a pressurized exhaust system. All vent connector joints must be sealed and fastened in accordance with the pellet pipe manufacturer's instructions to ensure consistent performance and avoid smoke and ash spillage.
2. A gasket on the exhaust blower housing or on the clean out trap is in bad condition.	Inspect the gasket on the exhaust blower housing to make sure it is in good condition. Make sure that all clean out trap gaskets are in good condition and all bolts are tight.

AUGER MOTOR STOP FEEDING PELLETS AND COMES BACK ON	
<u>Possible Cause:</u>	<u>Possible Remedy:</u>
1. The auger motor is overheating and tripping the internal temperature shutoff (thermal protector).	Start by emptying the hopper. Then, remove the auger motor by removing the screws holding the motor to the auger shaft. Once the motor is out, remove the four screws on the steel plate holding the auger shaft to the auger housing. Then, rotate the bottom end of the auger shaft down towards you until you can pull the shaft down out of the stove. After you have removed the shaft, inspect it for bent flights, burrs, or broken welds. Remove any foreign material that might have caused the jam. Also, check the auger housing for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam. Clean the auger housing thoroughly to remove all pellet dust. Repeat the process with the burn pot auger motor.

<ul style="list-style-type: none"> • GLASS “SOOTS” UP AT A VERY FAST RATE • FLAME IS LAZY, DARK, AND HAS BLACK TIPS • AFTER STOVE HAS BEEN ON FOR A WHILE, THE BURNPOT OVERFILLS 	
Possible Causes:	Possible Remedies:
1. Stove or vent pipe is dirty, which restricts airflow through the burn pot.	Follow all cleaning procedure in the maintenance section of the owner's manual.
2. Vent pipe installed improperly.	Check to make sure the vent pipe has been installed according to the criteria in the owner's manual.
3. Burn pot holes are blocked.	Remove the burn pot and clean it thoroughly.
4. Blockage in air intake pipe.	Visually inspect the air intake pipe that leads into the burn pot for foreign material.
5. Combustion blower is not working properly.	Check if the blower is still working (separately – bypassing the control board). Make sure that there is not any obstruction in the fresh air kit and into the air intake tube.
6. Bad pellets (Applies to “GLASS SOOTS UP AT A VERY FAST RATE” Only)	The brand of pellets or the batch of pellets that are being used may be of poor quality. If possible, try a different brand of pellets. You might also want to try a brand that is made from a different type of wood (softwood vs. hardwood). Different woods have different characteristics when being burned. Your pellets may also be too humid. Make sure you store your fuel properly, in a dry ventilated area.

<ul style="list-style-type: none"> • The control board does not display any information. 	
Possible Cause:	Possible Remedy :
1. A fuse on the control board has blown.	Remove the control board. Check if the F7 fuse on the back of it appears to be bad. Replace it with a 7.5 Amp 250 Volt fuse. Plug the stove back in and try to run the unit.

THE STOVE IS RUNNING BUT DISPLAYS WARNING CODE 	
Possibles Cause:	Possible Remedy :
Warning generated by a power failure while the stove was running.	The stove will restart on the initial setting once it cools off. Note: For a short power failure (less than 5 seconds), the stove will continue to function at the selected speed.

ALARM CODES CHART	
MESSAGE	CORRESPONDING WARNING
P	Pressure switch warning.
H	Warning caused by the automatic L-250 sensors: it is located over the pellet housing.
E	Hopper is empty
L	Lighting warning.
d	Hopper lid stayed open more than 3 minutes.
n	Inverted polarity in power outlet.
C	Power outage
I	Igniter fuse is blown
A	Auger fuse has blown

SMOKE SMELL OR SOOT BUILD-UP

Because it is a wood-burning device, your Drolet ECO-65 may emit a faint wood-burning odor. If this increases beyond normal, or if you notice an unusual soot build-up on walls or furniture, check your exhaust system carefully for leaks. All joints should be properly sealed. Also clean your stove, following instructions in **"MAINTENANCE"**. If problem persists, contact your dealer.

5. ELECTRICAL DIAGRAM

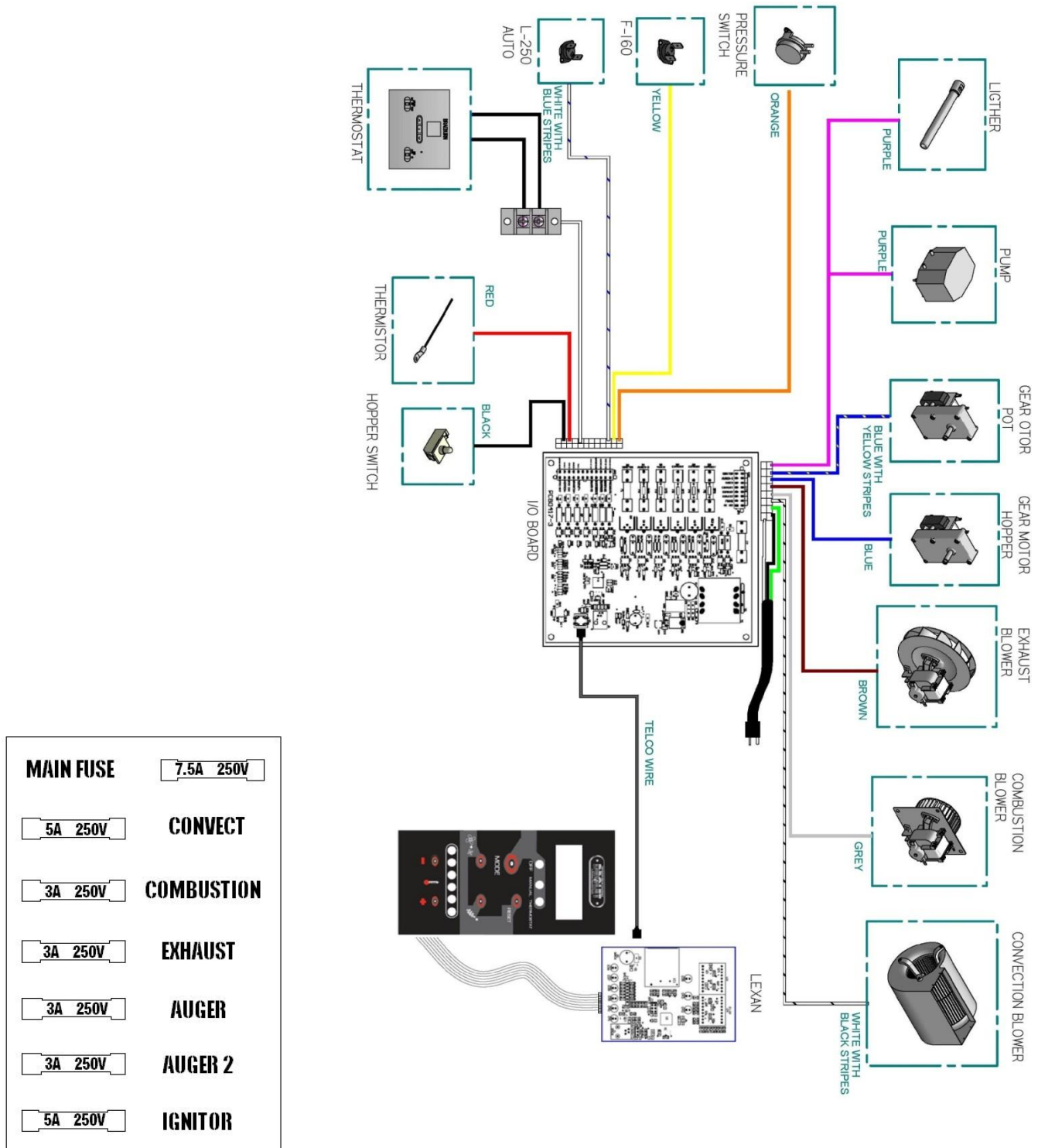


FIGURE 24

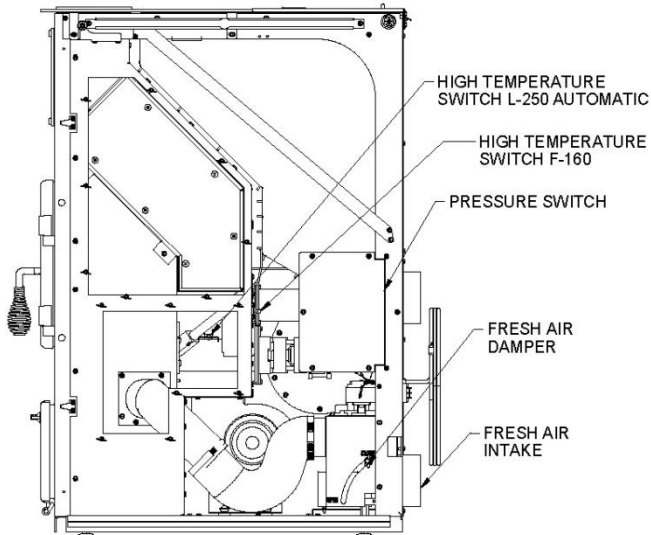


FIGURE 25

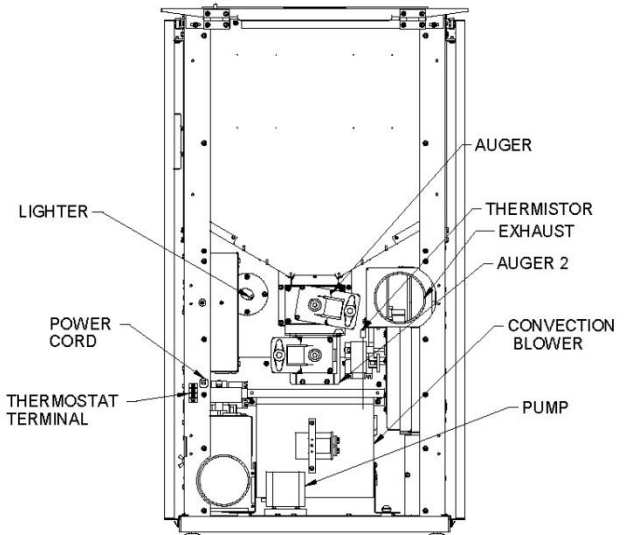


FIGURE 26

5.1. FUSE ACCESS

All fuses are located inside the pc board box, you must remove the pc board cover to access the fuse. To do so, simply remove the 5 screws securing it in place. Make sure you put the pc board box back in place before you restart the unit.

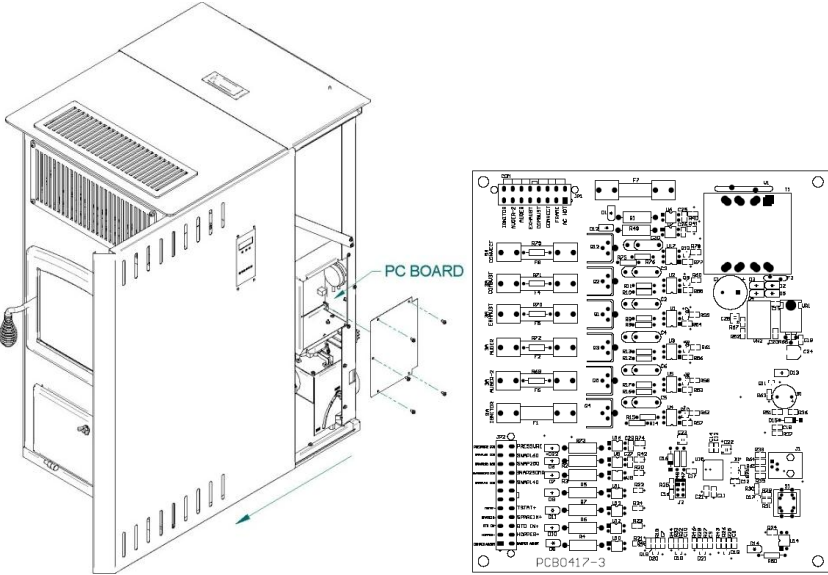


FIGURE 27

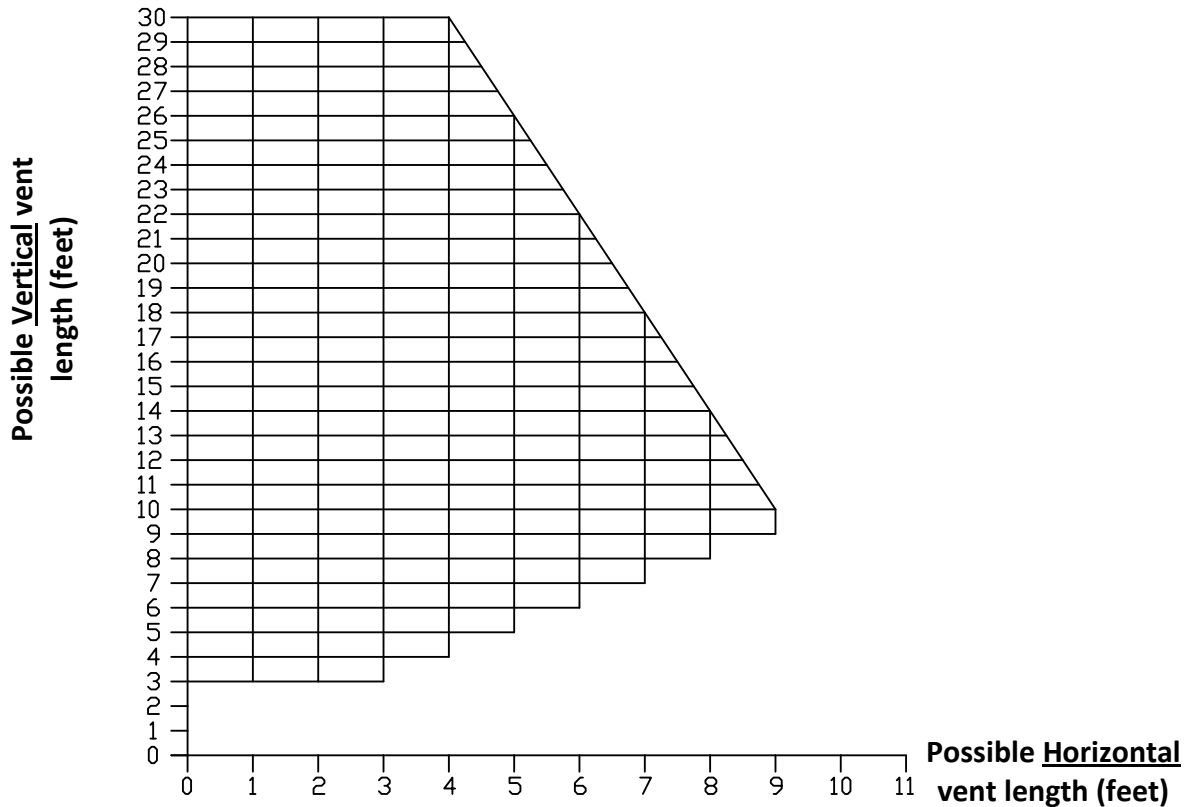
6. REPLACEMENT PARTS

Contact an Authorized DROLET Dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

ITEM	PART #
COIL HANDLE	AC07867
SCREW PLATE GASKET	21193
EXHAUST BLOWER GASKET	21194
HOPPER SCREW PLATE GASKET	21195
EXHAUST BLOWER CLEANOUT TRAP GASKET	21344
REAR LHS CLEANING GASKET	21352
FRONT LEFT CLEANING	21348
RIGHT CLEANING GASKET	21349
CONVECTION BLOWER WOOL	21350
SCREW ASSY	24030
NUT 1/8" PIPE	30164
RING 17/64" TYPE "AA"	30205
WING NUT 1/4-20	30416
HOPPER LID PLASTIC HANDLE	30527
BRASS BUSHING FOR PELLET STOVE AUGER	30528
BEARING	30545
FIRE POT LATCH	30686
1/2" ROPE FIBERGLASS GASKET	OA11395
PRESSURE SWITCH GRANULE	44029
THERMODISC 36T12 F160	44058
THERMODISC 36T11 L250 AUTOMATIC	44059
THERMISTOR	44095
PELLET STOVE SECURITY SWITCH	44098
COMBUSTION BLOWER	44104
EXHAUST FAN ASSEMBLY	SE62293
GEAR MOTOR FOR PELLET STOVE 1.7	44106
BURN POT GEAR MOTOR	44109
CONVECTION BLOWER	44108
I/O CONTROL PC BOARD	44138
IGNITER	44133
MEMBRANE SWITCH	44139
PIPE CLAMP	49400
AIR PUMP	60047
ELBOW BRASS 90	60101
AIR INTAKE DUCT COMPRESSIBLE	21077
FIBERGLASS 5/16" GASKET	AC06300
REPLACEMENT HANDLE KIT	AC09155
DOOR LATCH T KIT	AC09185
BURN POT	SE62254
ASH DRAWER	SE62290
GLASS	SE62400
MEMBRANE SWITCH ALPHANUMERIC MODULE	44140

APPENDIX A

HORIZONTAL AND VERTICAL VENT CHART


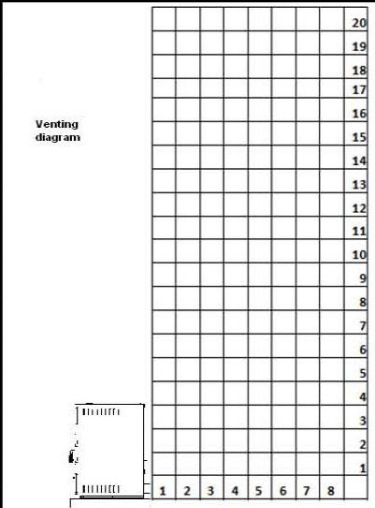


For example, let's imagine an installation consisting of a horizontal vent coming out at the back of the stove on a total distance of 8 feet. This horizontal run is followed by a Tee and a 6-foot vertical rise. This type of installation is not acceptable. As you can see, the vent termination is clearly outside the allowed configuration zone on the chart because the venting system proposed **does not have at least one foot of vertical rise for each foot of horizontal run.**

Instead, if the installation consisted of a horizontal vent coming out at the back of the stove on a total distance of 4 feet, followed by a Tee and a 6-foot vertical rise, it would be acceptable. The installation end should be within the allowable configuration zone on the chart since it would have at least one foot of vertical rise for each foot of horizontal run. Furthermore, the total vertical rise would be at least 3-foot high.

WARNING: TO REDUCE THE RISK OF SMOKE SPILLAGE, NEVER TERMINATE WITH A HORIZONTAL RUN. IF YOUR SYSTEM TERMINATES WITH A HORIZONTAL RUN, ADD AT LEAST 3 FEET OF VERTICAL RISE.

APPENDIX B

INSPECTION AND REPAIR FORM	 <p style="margin: 0;"> Fabrikant de poêle international inc. Stove Builder International Inc. 250, rue de Coenhague, St-Augustin-de-Desmaures (Québec) G3A 2H3 tél. : (418) 878-3040 Télécopie : (418) 878-3001 Courriel : tech@sbi-international.com </p>	INSTALLATION DIAGRAM		
	DRAW YOUR INSTALLATION 1 SQUARE = 1 FOOT			
	Installation		int. <input type="checkbox"/>	ext. <input type="checkbox"/>
	Installation size		4 <input type="checkbox"/>	3 <input type="checkbox"/>
	Stove location		Basement	Main floor
	CUSTOMER			
	Name			
	Address			
	City			
	Province / State			
Country				
Home telephone				
Work telephone				
Purchase date				
Model number				
Serial number				
Installation date				
Installer name				
Installer telephone				
Type of pellets				
Thermostat		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Outside air		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Ignition gasket / 2 magniglass		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
CLEANING		Equivalent vent lenght calculation table		
		Equivalent vent lenght (EVL)		
		Qty	Type of pipe	
		EVL		
PART	DAILY	+/- 10 bags	+/- 25 bags	
		+/- 50 bags		
Exchanger	<input type="checkbox"/> YES <input type="checkbox"/> NO			
Hopper		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
Evacuation blower		<input type="checkbox"/> YES <input type="checkbox"/> NO		
Blower blades			<input type="checkbox"/> YES <input type="checkbox"/> NO	
Pressure system		<input type="checkbox"/> YES <input type="checkbox"/> NO		
Burn pot	<input type="checkbox"/> YES <input type="checkbox"/> NO			
Evacuation system			<input type="checkbox"/> YES <input type="checkbox"/> NO	
Gaskets		<input type="checkbox"/> YES <input type="checkbox"/> NO		
INDICATE APPLIANCE CODE		DESCRIPTION OF THE PROBLEM		
Appliance code d <input type="checkbox"/> C <input type="checkbox"/> O <input type="checkbox"/> A <input type="checkbox"/> I <input type="checkbox"/> P <input type="checkbox"/> H <input type="checkbox"/> E <input type="checkbox"/> n <input type="checkbox"/> L <input type="checkbox"/>		Always use 4" pipe. Never use more than 30 feet of Equivalent Vent Length (EVL). The longer the run of pipe in your installation, the more restriction there is in the system. Minimum vertical length: 3 feet		

DROLET LIMITED LIFETIME WARRANTY

The warranty of the manufacturer extends only to the original consumer purchaser and is not transferable. This warranty covers brand new products only, which have not been altered, modified nor repaired since shipment from factory. Proof of purchase (dated bill of sale), model name and serial number must be supplied when making any warranty claim to your DROLET dealer.

This warranty applies to normal residential use only. Damages caused by misuse, abuse, improper installation, lack of maintenance, over firing, negligence, accident during transportation, power failures, downdrafts, or venting problems are not covered by this warranty.

This warranty does not cover any scratch, corrosion, warping, or discoloration caused by over firing, abrasives or chemical cleaners. Any defect or damage caused by the use of unauthorized parts or others than original parts void this warranty. An authorized qualified technician must perform the installation in accordance with the instructions supplied with this product and all local and national building codes. Any service call related to an improper installation is not covered by this warranty.

The manufacturer may require that defective products be returned or that digital pictures be provided to support the claim. Returned products are to be shipped prepaid to the manufacturer for investigation. If a product is found to be defective, the manufacturer will repair or replace such defect. Transportation fees to ship the product back to the purchaser will be paid by the manufacturer. Repair work covered by the warranty, executed at the purchaser's domicile by an authorized qualified technician requires the prior approval of the manufacturer. Labour cost and repair work to the account of the manufacturer are based on predetermined rate schedule and must not exceed the wholesale price of the replacement part. All parts and labour costs covered by this warranty are limited according to the table below.

The manufacturer at its discretion may decide to repair or replace any part or unit after inspection and investigation of the defect. The manufacturer may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of any warranted but defective parts. The manufacturer shall in no event be responsible for any special, indirect, consequential damages of any nature, which are in excess of the original purchase price of the product. A one-time replacement limit applies to all parts benefiting from a lifetime coverage. This warranty applies to products purchased after March 1st, 2009.

DESCRIPTION	WARRANTY APPLICATION	
	PARTS	LABOUR
Combustion chamber (welds only), heat exchanger (welds only), auger, and castings.	Lifetime	3 years
Stainless steel firebox components, surrounds and heat shields, ash drawer, pedestal, trims (aluminum extrusions), and plating* (defective manufacture).	5 years	3 years
Carbon steel firebox components, burn pot, glass retainers, and handle assembly.	3 years	1 year
Blowers, auger motor, PC board, igniter, heat sensors, switches, wiring, rheostat, and other controls.	2 years	1 year
Ceramic glass (thermal breakage only*), paint (peeling), gaskets, insulation, ceramic logs, masonry-like panels, and ceramic fibre blankets.	1 year	n/a

**Pictures required*

Shall your unit or a components be defective, contact immediately your **DROLET** dealer. Prior to your call make sure you have the following information necessary to your warranty claim treatment:

- Your name, address and telephone number;
- Bill of sale and dealer's name;
- Serial number and model name as indicated on the nameplate fixed to the back of your unit;
- Nature of the defect and any relevant information.

Before shipping your unit or defective component to our plant, you must obtain from your DROLET dealer an Authorization Number. Any merchandise shipped to our plant without authorization will be refused automatically and returned to sender.