

# PELLET STOVE MERIDIAN

Freestanding and Fireplace Insert

# TECHNICAL MANUAL





Contact your building or fire officials about restrictions and installation inspection requirements in your area.



PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS PELLET-BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH.

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#### INTRODUCTION

\* This manual is designed for the technician in conjunction with the owner's manual. \*

#### RATING LABEL LOCATION:

The rating label is located on the inside of the ash pan cover.

#### **IMPORTANT SAFETY DATA:**

Please read this entire Owner's Manual before installing or operating your ENVIRO Pellet Stove. Failure to follow these instructions may result in property damage, bodily injury or even death. Contact your local building or fire official to obtain a permit and any information on installation restrictions and inspection requirements for your area.

To prevent the possibility of a fire, ensure that the appliance is properly installed by adhering to the installation instructions. An ENVIRO dealer will be happy to assist you in obtaining information with regards to your local building codes and installation restrictions.

Be sure to maintain the structural integrity of the home when passing a vent through walls, ceilings, or roofs.

The stove's exhaust system works with negative combustion chamber pressure and a slightly positive chimney pressure. It is very important to ensure that the exhaust system be sealed and airtight. The ash pan and viewing door must be locked securely for proper and safe operation of the pellet stove.

Do not burn with insufficient combustion air. A periodic check is recommended to ensure proper combustion air is admitted to the combustion chamber. Setting the proper combustion air is achieved by adjusting the slider damper located on the left side of the stove.

When installing the stove in a mobile home, it must be electrically grounded to the steel chassis of the home and bolted to the floor. Make sure that the structural integrity of the home is maintained and all construction meets local building codes.

Minor soot or creosote may accumulate when the stove is operated under incorrect conditions such as an extremely rich burn (black tipped, lazy orange flames).

If you have any questions with regard to your stove or the above-mentioned information, please feel free to contact your local dealer for further clarification and comments.

#### SAFETY WARNINGS AND RECOMMENDATIONS:

Caution: Do not connect to any air distribution duct or system.

Do not burn garbage or flammable fluids such as gasoline, naptha or engine oil. Unit hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.

**SOOT:** Operation of the stove with insufficient combustion air will result in the formation of soot which will collect on the glass, the heat exchanger, the exhaust vent system, and may stain the outside of the house. This is a dangerous situation and is inefficient. Frequently check your stove and adjust the slider/damper as needed to ensure proper combustion. **See: "Slider/Damper Setting".** 

**CLEANING:** There will be some build up of fly ash and small amounts of creosote in the exhaust. This will vary due to the ash content of the fuel used and the operation of the stove. It is advisable to inspect and clean the exhaust vent semi-annually or every two tons of pellets.

#### INTRODUCTION

**ELECTRICAL:** The use of a surge protected power bar is recommended. The unit must be grounded. The grounded electrical cord should be connected to a standard 115 volts (4.6 Amps), 60 hertz electrical outlet. Be careful that the electrical cord is not trapped under the appliance and that it is clear of any hot surfaces or sharp edges and also must be accessible. If this power cord should become damaged, a replacement power cord must be purchased from the manufacture or a qualified ENVIRO dealer. This unit's maximum power requirement is 520 watts.

**GLASS:** Do not abuse the glass by striking or slamming the door. Do not attempt to operate the stove with broken glass. The stove uses ceramic glass. Replacement glass must be purchased from an ENVIRO dealer. Do not attempt to open the door and clean the glass while the unit is in operation or if glass is hot. To clean the glass, use a soft cotton cloth and mild window cleaner, gas or wood stove glass cleaner, or take a damp paper towel and dip into the fly ash. This is a very mild abrasive and will not damage the glass.

**FLAMMABLE LIQUIDS: Never** use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in the heater. Keep all such liquids well away from the heater while it is in use.

**SMOKE DETECTOR:** Smoke detectors should be installed and maintained in the structure when installing and operating a pellet burning appliance.

**OPERATION:** The ash pan and door must be closed securely for proper and safe operation of the pellet stove. Also ensure all gaskets on the door are checked and replaced when necessary.

**INSTALLATION:** Be sure to maintain the structural integrity of your home when passing a vent through walls, ceilings, or roofs. It is recommended that the unit be secured into its position in order to avoid any displacement.

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

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

**FRESH AIR:** Outside Fresh Air connection is optional. Must be connected to all units installed in Mobile and "Air Tight Homes" (R2000) or where required by local codes. Consider all large air moving devices when installing your unit and provide room air accordingly. Limited air for combustion may result in poor performance, smoking and other side effects of poor combustion.

If you have any questions with regards to your stove or the above-mentioned information, please feel free to contact your local dealer for further clarification and comments.

SINCE SHERWOOD INDUSTRIES LTD. HAS NO CONTROL OVER THE INSTALLATION OF YOUR STOVE, SHERWOOD INDUSTRIES LTD. GRANTS NO WARRANTY IMPLIED OR STATED FOR THE INSTALLATION OR MAINTENANCE OF YOUR STOVE. THEREFORE, SHERWOOD INDUSTRIES LTD. ASSUMES NO RESPONSIBILITY FOR ANY CONSEQUENTIAL DAMAGE(S).

SAVE THIS INSTRUCTION MANUAL FOR FUTURE REFERENCE

#### DECIDING WHERE TO LOCATE YOUR PELLET APPLIANCE:

- 1. Check clearances to combustibles (see Installation Clearances to Combustibles
  - Freestanding, Installation Alcove Clearances Freestanding, and Installation
  - CLEARANCES TO COMBUSTIBLES FIREPLACE INSERT.
- 2. Do not obtain combustion air from an attic, garage or any unventilated space. Combustion air may be obtained from a ventilated crawlspace.
- 3. Do not install the stove in a bedroom.
- 4. You can vent the stove through an exterior wall behind the unit or connect it to an existing masonry or metal chimney (must be lined if the chimney is over 6" (15 cm) diameter, or over 28 inches<sup>2</sup> (180 cm<sup>2</sup>) cross sectional area). An interior vent can be used with approved pipe passing through the ceiling and roof.
- 5. Locate the stove in a large and open room that is centrally located in the house. This will optimize heat circulation.
- 6. The power cord is 8 feet (2.43 m) long and may require a grounded extension cord to reach the nearest electrical outlet.



We recommend that our pellet hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Pellet Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



#### REMOVING PELLET STOVE FROM PALLET:

To remove your new stove from its pallet, remove the two (2) screws securing the bottom to the pallet. Freestanding: One screw can be easily seen from behind but to access the second screw the ashpan must be removed.

Fireplace Insert: There is one screw on either side of the bottom.

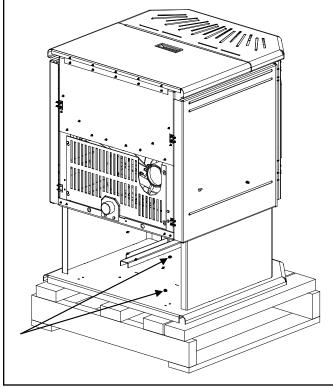


Figure 1: Removing Freestanding Stove From the Pallet.

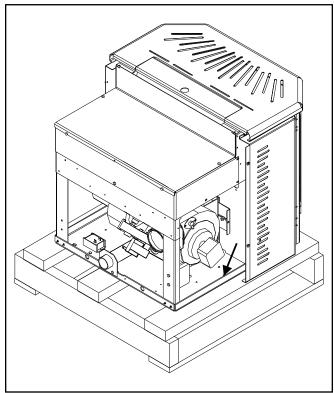


Figure 2: Removing Insert Stove From the Pallet.

#### **DIMENSIONS - FREESTANDING:**

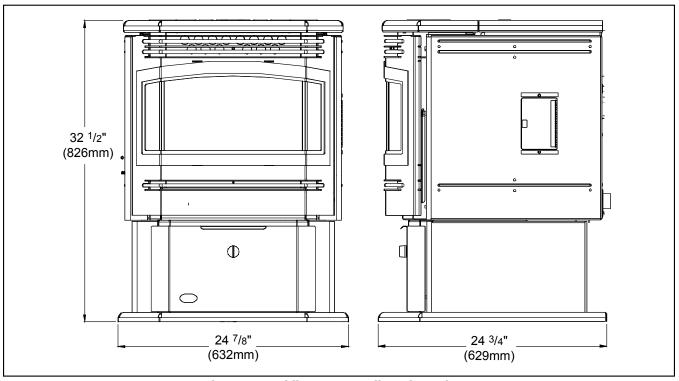


Figure 3: Meridian Freestanding Dimensions.

#### **DIMENSIONS - FIREPLACE INSERT:**

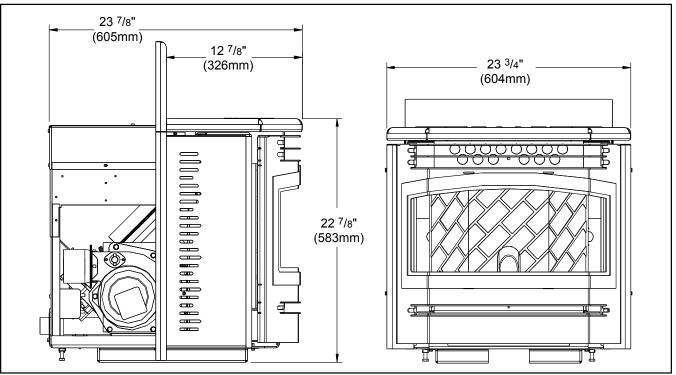


Figure 4: Meridian Fireplace Insert Dimensions.

#### **CLEARANCES TO COMBUSTIBLES - FREESTANDING:**

These dimensions are minimum clearances but it is recommended that you ensure sufficient room for

serving, routine cleaning and maintenance.

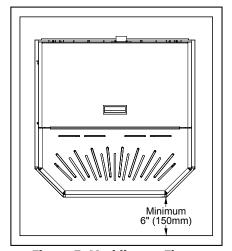


Figure 5: Meridian on Floor Protection.

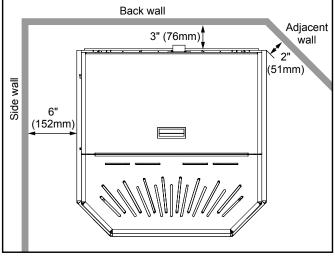


Figure 6: Minimum Clearances to Combustibles for Freestanding Meridian.

This pellet stove requires floor protection. The floor protection must be non-combustible, extending beneath the stove the full width and depth of the unit including 6" (150 mm) in front for ember protection.

#### **ALCOVE CLEARANCES - FREESTANDING:**

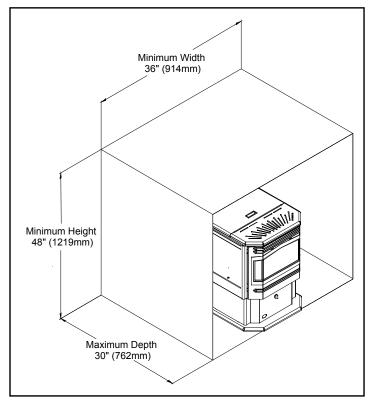


Figure 7: Alcove Clearances Freestanding Meridian.

#### CLEARANCES TO COMBUSTIBLES - FIREPLACE INSERT:

The fireplace insert must be installed into a masonry fireplace. This model includes a surround faceplate and a pedestal. When installing this unit, ensure that the pedestal is removed from the inside of the hopper and installed on the bottom of the unit. Refer to Installation - Installation of Pedestal and Leveling Legs - Fireplace Insert and Installation - Installing Hopper Cover and Adjusting Hopper Height - Fireplace Insert before proceeding.

From the body of the heater to the side wall:

From the body of the heater to the Facing on masonry fireplace:

8 inches (203 mm) minimum
8 inches (203 mm) minimum
8 inches (203 mm) minimum

#### INSTALLATION OF PEDESTAL AND LEVELING LEGS - FIREPLACE INSERT:

There are two parts to the Meridian insert pedestal and they can be found inside the hopper. Place unit on its back. Two (2) hex head screws are used on each side of the pedestal (refer to Figure 8). Using a 5/16" wrench or socket attach the pedestal to the bottom of the unit.

#### **OPTIONAL:**

There are two (2) leveling legs and they can be found inside the manual bag. Each leveling leg consists of a long bolt, a hex nut, a washer, and a square bolt with clip (see Figure 9). For installation of the leveling legs the unit should be on its back and a  $\frac{1}{2}$ " wrench is required for adjustments.

Install the square bolts into the square holes in the back corners of the bottom. The square bolt should be inserted from inside the unit so that the clip will be facing up.

Thread hex nut onto the bolt till it is approximately 1" (25 mm) from the bolt head, slide washer onto bolt. Thread the bolt into the square nut so length of the bolt shown is the approximately height needed for leveling. When the unit is up right and the bolts can be adjusted to the exact height required. To lock the bolts at a height tighten the hex nut and washer against the square bolt

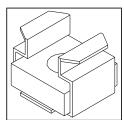


Figure 9: Square Bolt.

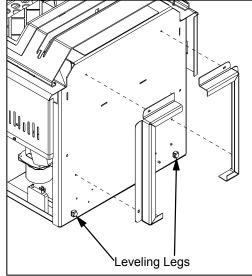


Figure 8: Installing Pedestal.

#### INSTALLING HOPPER COVER AND ADJUSTING HOPPER HEIGHT - FIREPLACE INSERT:

The hopper cover initially comes upside-down on top of the hopper. To install the hopper cover flip the cover over and fasten in place with four T-20 screws (see Figure 10).

The back height of this unit can be set to one (1) of three (3) heights; 19'' (483 mm),  $21\frac{1}{8}''$  (537 mm),  $22\frac{1}{4}''$  (565 mm). The hopper should be set to the maximum height that can be used in the installation.

To change the height of the hopper back up or down, remove the seven (7) T-20 screws, three (3) on each side and one (1) on the back. The screw placement is shown Figure 11. Move the hopper assembly to the required setting and replace the screws. When the hopper back is in place it is recommended that silicone is used to seal the bottom lip of the hopper back and sides

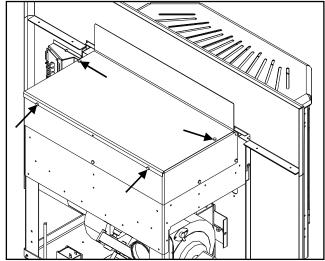


Figure 10: Hopper Cover Screw Placement.

Figure 11: Hopper Extension Screw Placement.

#### MOBILE HOME INSTALLATION - FREESTANDING:

- Secure the heater to the floor using the holes in the pedestal of the appliance.
- Ensure the unit is electrically grounded to the chassis of your home (permanently).

#### **WARNING:** Do not install in a room people sleep in.

# <u>CAUTION</u>: The structural integrity of the manufactured home floor, wall and ceiling/roof must be maintained

• Outside fresh air is mandatory. Secure outside air connections directly to fresh air intake pipe and secure with three (3) screws evenly spaced.

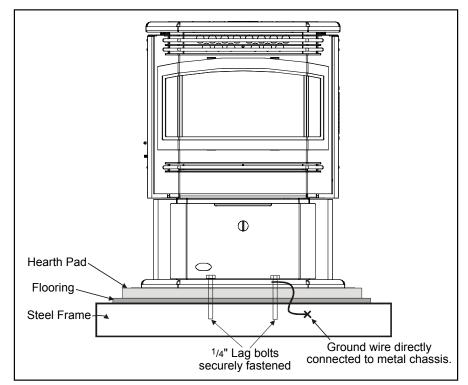


Figure 12: Mobile Home Install Mounting.

#### **VENT TERMINATION REQUIREMENTS:**

IT IS RECOMMENDED THAT YOUR PELLET STOVE BE INSTALLED BY AN AUTHORIZED DEALER/INSTALLER.

Letter	Minimum Clearance	Description	
Α	24 in (61 cm)	Above grass, top of plants, wood, or any other combustible materials.	
В	48 in (122 cm)	From beside/below any door or window that may be opened.	
С	24 in (61 cm)	From above any door or window that may be opened.	
D	24 in (61 cm)	To any adjacent building, fences and protruding parts of the structure.	
E	24 in (61 cm)	Below any eave or roof overhang	
F	12 in (30 cm)	To outside corner.	
G	12 in (30 cm)	To inside corner, combustible wall (vertical and horizontal terminations).	
Н	3 ft (91 cm) within a height of 15 ft (4.5 m) above the meter/ regulator assembly		
I	3 ft (91 cm)	From any forced air intake of other appliance	
J	12 in (30 cm)	Clearance to non-mechanical air supply inlet to building, or the combustion air inlet to any appliance.	
K	24 in (61 cm)	Clearance above roof line for vertical terminations.	
L	7 ft (2.13 m)	Clearance above paved sidewalk or paved driveway located on public property.	

1. Do not terminate the vent in any enclosed or semi-enclosed areas such as a carport, garage, attic, crawlspace, narrow walkway, closely fenced area, under a sundeck or porch, or any location that can build up a concentration of fumes such as stairwells, covered breezeway, etc.

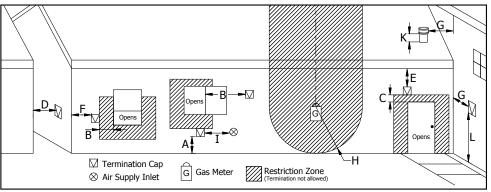
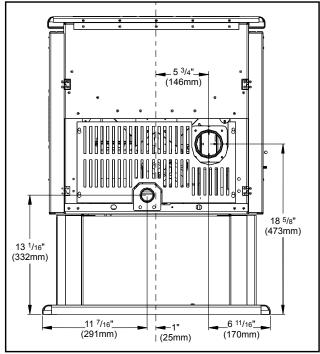


Figure 13: Use in conjunction with Table 1 for allowable exterior vent termination locations.

- 2. Vent surfaces can become hot enough to cause burns if touched by children. Non-combustible shielding or guards may be required.
- 3. Termination must exhaust above the inlet elevation. It is recommended that at least five feet of vertical pipe be installed outside when the appliance is vented directly through a wall, to create some natural draft to prevent the possibility of smoke or odor during appliance shut down or power failure. This will keep exhaust from causing a nuisance or hazard from exposing people or shrubs to high temperatures. In any case, the safest and preferred venting method is to extend the vent through the roof vertically.
- 4. Distance from the bottom of the termination and grade is 12" (30 cm) minimum. This is conditional upon the plants and nature of grade surface. The exhaust gases are hot enough to ignite grass, plants and shrubs located in the vicinity of termination. The grade surface must not be lawn.
- 5. If the unit is incorrectly vented or the air to fuel mixture is out of balance, a slight discoloration of the exterior of the house might occur. Since these factors are beyond the control of Sherwood Industries Ltd, we grant no guarantee against such incidents.

NOTE: Venting terminals shall not be recessed into walls or siding.

#### **EXHAUST AND FRESH AIR INTAKE LOCATIONS:**



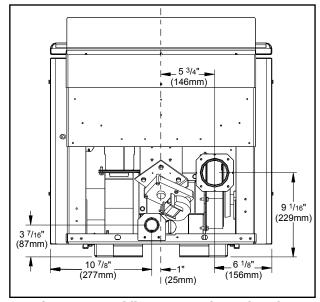


Figure 15: Meridian Insert Inlet and Outlet Location.

Figure 14: Meridian Freestanding Inlet and Outlet Location.

EXHAUST	Freestar	nding	Insert	
Base of unit to center of flue	18 %"	(473 mm)	9 1/16"	(229 mm)
Side of unit to center of flue	6 <sup>11</sup> /16"	(170 mm)	6 1⁄8″	(156 mm)
Center of unit to center of flue	5 ¾"	(146 mm)	5 ¾"	(146 mm)
FRESH AIR INTAKE.				
Base of unit to center of intake	13 <sup>1</sup> /16"	(332 mm)	3 7/16"	(87 mm)
Side of unit to center of intake	11 <sup>7</sup> /16"	(291 mm)	10 %"	(277 mm)
Center of unit to center of flue	1"	(25 mm)	1"	(25 mm)

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER

#### **OUTSIDE FRESH-AIR CONNECTION:**

Outside fresh air is mandatory when installing this unit in airtight homes and mobile homes.

A Fresh-air intake is strongly recommended for all installations. Failure to install intake air may result in improper combustion as well as the unit smoking during power failures.

When connecting to an outside fresh air source, do not use plastic or combustible pipe. A 2" minimum (51 mm) ID (inside diameter) steel, aluminum or copper pipe should be used. It is recommended, when you are installing a fresh air system, to keep the number of bends in the pipe to a minimum.

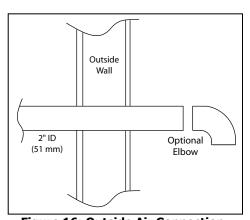


Figure 16: Outside Air Connection.

#### CORNER THROUGH WALL INSTALLATION - FREESTANDING:

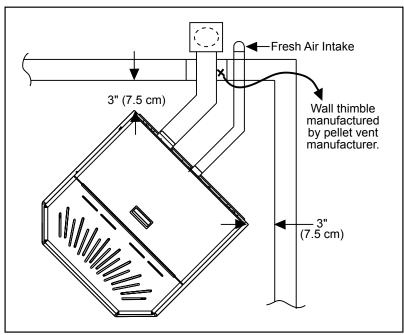


Figure 17: Corner Installation.

#### HORIZONTAL EXHAUST THROUGH WALL INSTALLATION - FREESTANDING:

#### Vent installation: install vent at clearances specified by the vent manufacturer.

A chimney connector shall not pass through an attic or roof space, closet or similar concealed spaces, or a floor, or ceiling. Where passage through a wall or partition of combustible construction is desired, the installation shall conform to CAN/CSA-B365 Installation Code for Solid-Fuel-Burning Appliances and Equipment. Only use venting of L or PL type with an inside diameter of 3 or 4 inches (7.6 or 10.1 cm).

- 1. Choose a location for your stove that meets the requirements stated in this manual and allows installation with the least amount of interference to house framing, plumbing, wiring, etc.
- 2. Install a non-combustible hearth pad (where necessary).
- 3. Place the appliance 15" (37.5 cm) away from the wall. If the stove is to be set on a hearth pad, set the unit on it.
- 4. Locate the center of the exhaust pipe on the stove. Extend that line to the wall. Once you have located the center point on the wall, refer to pellet vent manufacturer installation instructions for correct hole size and clearance to combustibles.
- 5. Install the wall thimble as per the instructions written on the thimble. Maintain an effective vapour barrier in accordance with local building codes.
- 6. Install a length of 3" (76 mm) or 4" (101 mm) vent pipe into the wall thimble. The pipe should install easily into the thimble.
- 7. Install the fresh air intake (see Installation Outside Fresh Air Connection).
- 8. Connect the exhaust vent pipe to the exhaust pipe on the stove. Seal the connection with high temperature silicone.
- 9. Push the stove straight back, leaving a minimum of 2" (5 cm) clearance from the back of the stove to the wall. Seal the vent pipe to the thimble with high temperature silicone.

- 10. The pipe must extend at least 12" (30 cm) away from the building. If necessary, bring another length of pipe (PL type) to the outside of the home to connect to the first section. Do not forget to place high temperature silicone around the pipe that passes through the thimble.
- 11. Install a vertical pipe, or if all requirements for direct venting are met, install vent termination. The stainless steel

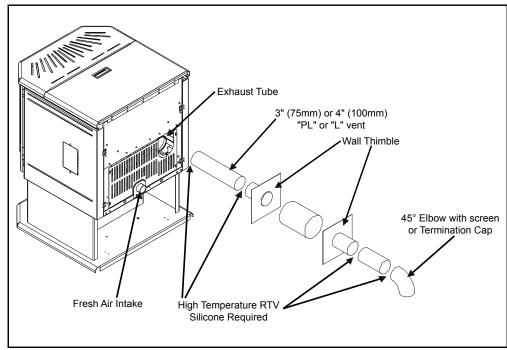


Figure 18: Straight through wall Installation.

cap termination manufactured by the vent manufacturer is recommended. However, when the vent terminates several feet above ground level and there are no trees, plants, etc. within several feet, a 45° elbow can be used as termination. The elbow must be turned down to prevent rain from entering.

#### NOTE:

• Some horizontal through wall installations may require a "T" and 3 to 5 feet (91 to 152 cm) of vertical pipe outside the building to help naturally draft in the unit.

• This may be required if a proper burn cannot be maintained, after the stove has been tested and the airflow set.

- This is due to the back pressure in the exhaust caused by airflow around the structure.
- All sections of pipe must have three (3) screws evenly spaced and all horizontal and vertical vent sections located within the house must have a bead of high temperature silicone installed on the male end of the pipe before installation to create a gas tight seal.
- The termination must be 12 inches (30 cm) from the outside wall and 12 inches (30 cm) above the ground.
- A 45° elbow with a rodent screen may be used in place of the termination cap (or stainless steel termination hood).

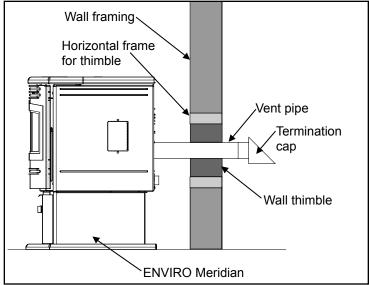


Figure 19: Straight through Wall Installation - Side View.

#### VERTICAL RISE WITH HORIZONTAL TERMINATION INSTALLATION (RECOMMENDED) - FREESTANDING:

A 45° elbow with a rodent screen may be used in place of the termination cap (or stainless steel termination hood).

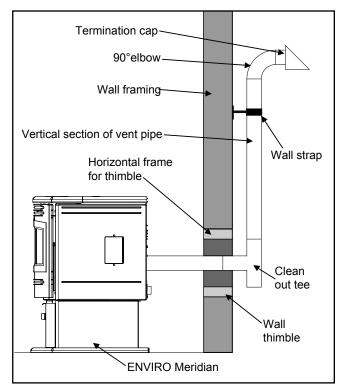


Figure 20: Through Wall with Horizontal Termination.

#### THROUGH CONCRETE WALL WITH VERTICAL RISE INSTALLATIONS - FREESTANDING:

A 45° elbow with a rodent screen may be used in place of the termination cap (or stainless steel termination hood).

This is the recommended installation to use if there is a concrete or retaining wall in line with exhaust vent on pellet stove.

The termination must be 12 inches (30 cm) from the outside wall and 12 inches (30 cm) above the ground.

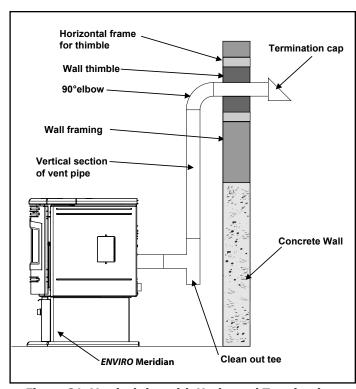


Figure 21: Vertical rise with Horizontal Termination.

#### Inside Vertical Installations - Freestanding:

- 1. Choose a stove location that is ideal. See the section "Installation Deciding Where to Locate your Pellet Appliance."
- 2. Place the unit on the hearth pad (if installed on a carpeted surface) and space the unit in a manner so when the pellet vent is installed vertically, it will be 3" (76 mm) away from a combustible wall.
- 3. Locate the center of the fresh air intake pipe on the unit. Match that center with the same point on the wall and cut a hole about 2" (51 mm) in diameter.
- 4. Install the fresh air intake pipe.
- 5. Install the tee with clean out.
- 6. Install the pellet vent upward from there. When you reach the ceiling, make sure that the vent goes through the ceiling fire stop. Maintain a 3" (76 mm) distance to combustibles and keep attic insulation away from the vent pipe. Maintain an effective vapor barrier.
- 7. Finally, extend the pellet vent to go through the roof flashing.
- 8. Ensure that the rain cap is approximately 24" (610 mm) above the roof.

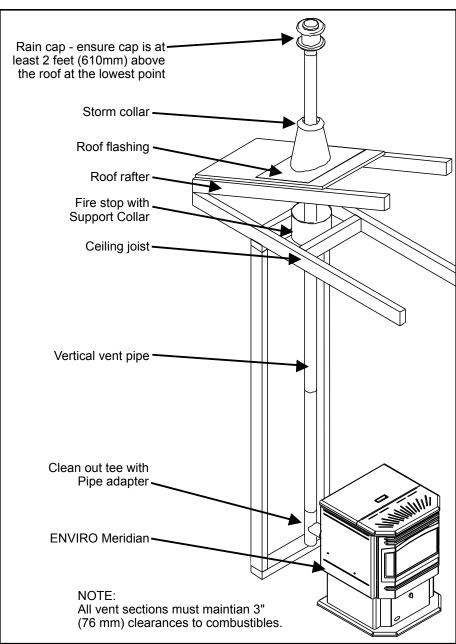


Figure 22: Inside Vertical Installation.

#### **O**UTSIDE **V**ERTICAL **I**NSTALLATIONS - **F**REESTANDING:

To accomplish a outside vertical pipe installation, follow steps 1 through 5 in the "Inside Vertical Installations - Freestanding" section and then finish it by performing the following (refer to Figure 23).

- 1. Install a tee with clean out on the outside of the house.
- 2. Install PL vent upward from the tee. Make sure that you install support brackets to keep the vent straight and secure.
- 3. Install ceiling thimble and secure the flashing as you go through the roof.
- 4. Ensure that the rain cap is approximately 24" (610 mm) above the roof.

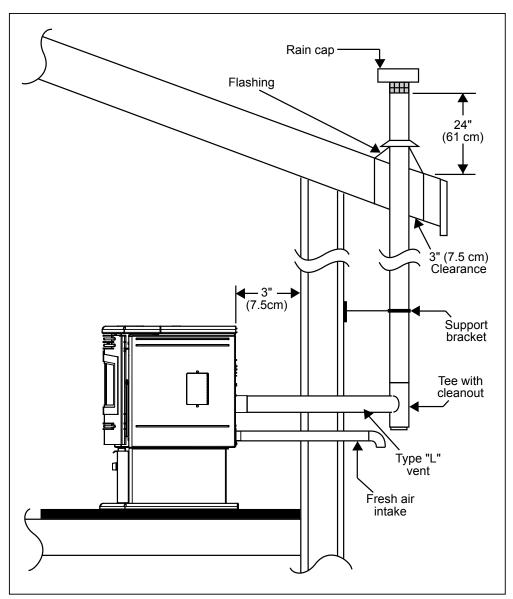


Figure 23: Outside Vertical Installation.

#### **HEARTH MOUNT INSTALLATION - FREESTANDING:**

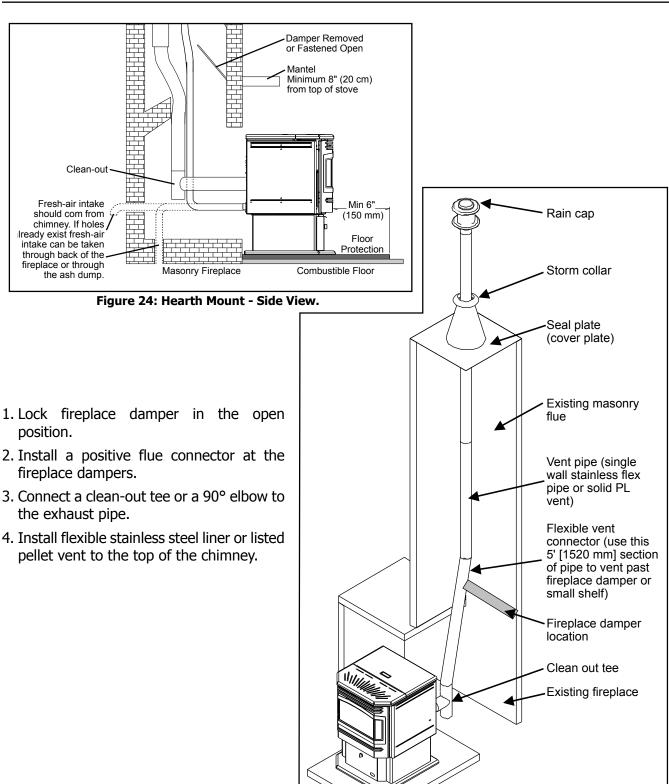


Figure 25: Hearth Mount - Over View.

#### INSTALLATION WITH EXTERIOR MOUNTED EXHAUST BLOWER - FREESTANDING:

The MERIDIAN can be equipped with an externally mounted exhaust blower (PART #20-070). This optional kit will include all components necessary to install the exhaust blower on any external vertical wall surface.

Choose a location for your stove that meets the requirements stated in this manual and allows installation with the least amount of interference to house framing, plumbing, wiring, etc.

Included in the exterior mounted exhaust blower kit are:

- 1 Exhaust blower housing box.
- 1 Blower cover plate.
- 1 Hardware bag
- 1. Open the left side of the unit and the back grill and disconnect the Exhaust Blower wires from the harness. Remove the exhaust blower by undoing the six (6) 1/4 hex head sheet metal screws that fasten the blower to the housing.
- 2. Remove the back grill from the exterior exhaust vent housing and remove the round cover plate installed on the blower housing.
- 3. Install the round cover plate over the gasketed opening in the stove where the exhaust motor was removed from.
- 4. Install the exhaust blower motor in the Exterior Vent Housing Box onto the exhaust blower housing.
- 5. Follow the procedures for Installation Horizontal Exhaust Through Wall Installation Freestanding. Place the unit in the desired location. Cut the hole in the wall at the desired location. Install a wall thimble.
- 6. Drill holes in the wall thimble in the corresponding locations for wire and fresh air if needed. Install wire clamps and feed wire through the hole in the thimble into the house. Tighten clamp on wire and attach green ground wire (at the symbol) with the screw and star washer provided.
- 7. Attach a short or an adjustable section of 3" of double wall pellet vent through the wall thimble to the stove. Seal all joints with silicone. Maintain clearances to combustibles.
- 8. Apply silicone to the pipe in the Exhaust Box, slide the pipe into the exhaust vent. Mount the Exhaust Box to the house. Reinstall the back grill on the Exterior Vent Housing Box. Apply normal venting practices when installing the vertical vent pipe.
- 9. Connect the wires in the stove. Re-install the Left side and Back Grill on the stove.
- 10. Set the Slider Damper as described in the Installation SLIDER/DAMPER SETTING" section.

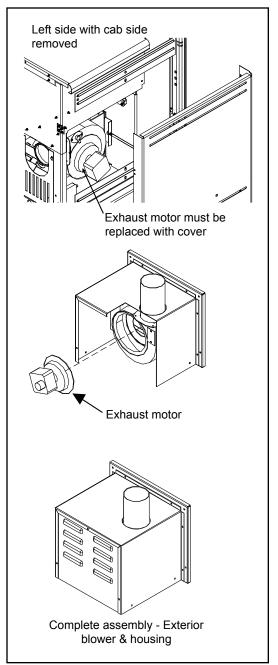


Figure 26: Exterior Exhaust Blower.

#### **NOTE:**

Ensure that all vent connections are installed by placing three (3) screws evenly spaced and a small bead of high temperature silicone at each chimney connection. Also ensure that all vertical vent sections are properly supported and that all clearances to combustibles are maintained in accordance with the vent manufacturer's specifications.

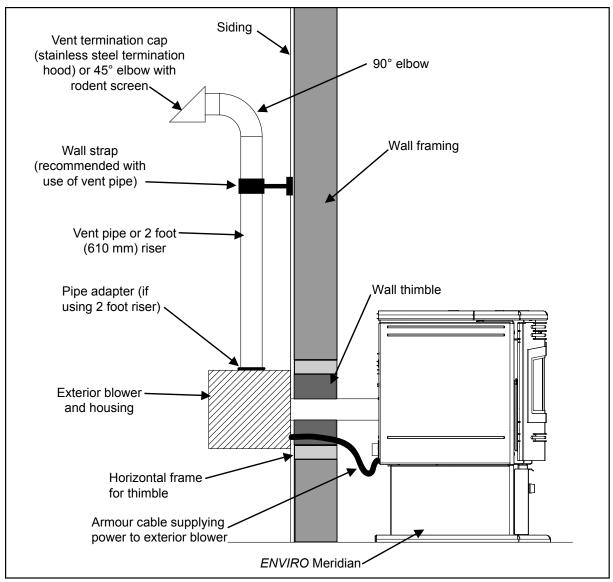


Figure 27: Exhaust Blower Installation; Horizontal Termination.

#### TO SUPPLY POWER TO THE EXHAUST BLOWER:

Install an amour coated electrical cable from the exhaust blower housing, through the wall thimble, and attach to the pre-drilled hole in the left hand rear hopper pillar. Hook up to wires from the wiring harness for the exhaust blower. All electrical connections must be in accordance with local code requirements (see Wiring Diagram).

#### THROUGH WALL VERTICAL INSTALLATION WITH EXHAUST BLOWER - FREESTANDING:

Refer to Installation - Installation with Exterior Mounted Exhaust Blower - Freestanding and Installation - Outside Vertical Installations - Freestanding. Ensure that vent pipe is properly secured to wall using wall straps. Maintain clearances to combustibles on vent pipe as well as unit.

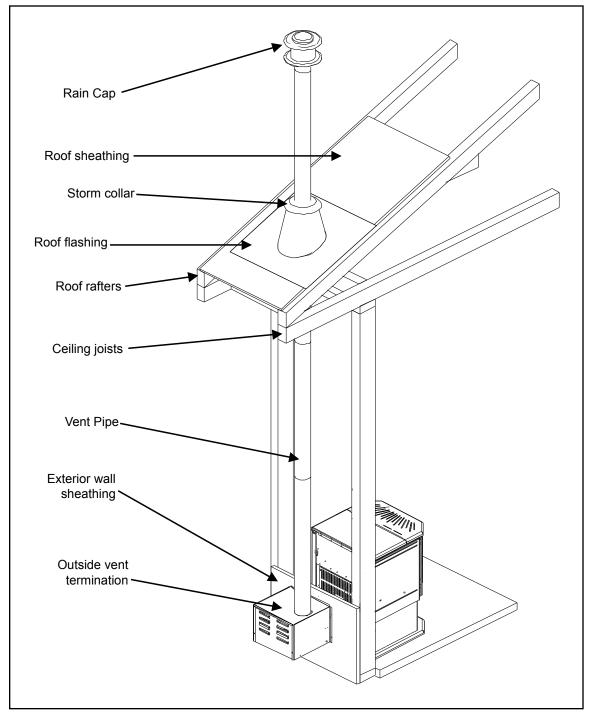


Figure 28: Exhaust Blower Installation; Vertical Termination.

#### MASONRY FIREPLACE INSERT INSTALLATION - FIREPLACE INSERT:

The Fireplace insert model requires a surround faceplate and a pedestal. When installing this unit, ensure that the pedestal is removed from the inside of the hopper and installed on the bottom of the unit (Refer to Installation - Installation of Pedestal and Leveling Legs - Fireplace Insert).

Adjust hopper height (see Installation - Installing Hopper Cover and Adjusting Hopper Height - Fireplace Insert) and assemble surround panel (see Installation - Installation and Removal of Control Panel in The Surround Panel - Fireplace Insert and Installation - Assembly and Installation of Insert Surround Panels - Fireplace Insert)

before starting installation.

A noncombustible hearth pad must cover combustible flooring underneath, as well as 6" (150 mm) in front of the heater and 6" (150 mm) to the side of the heater

- 1. Install the hearth pad.
- 2. Lock the fireplace damper in the open position.
- 3. Install a positive flue connector at the fireplace damper.
- 4. Connect a tee or 90° degree elbow to the exhaust pipe.
- 5. This fireplace insert must be installed with a continuous chimney liner of 3 or 4" diameter extending from the fireplace insert to the top of the chimney. The liner must conform to type 3 requirements of CAN/ULC S635.
- (Recommended) Install fresh air intake either through the back of the fireplace or through the positive flue connector.

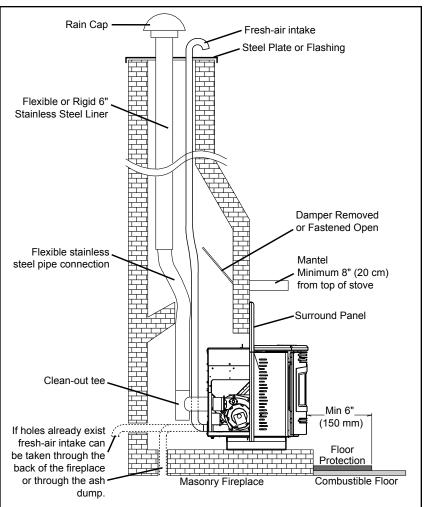


Figure 29: Installation of Fireplace Insert.

When installing the insert into a masonry fireplace DO NOT remove any bricks or masonry, with the following exception; masonry or steel, including the damper plate, may be removed from the smoke shelf and adjacent damper frame if necessary to accommodate a chimney liner. Provided that their removal will not weaken the structure of the fireplace and chimney, and will not reduce protection for combustible materials to less than that required by the national building code.

When installing the fireplace insert into a zero clearance fireplace, **DO NOT** cut or modify any factory firebox parts. If the fireplace insert does not fit into a zero clearance fireplace we recommend you use an ENVIRO freestanding model and install as a hearth mounted unit. Install a 3" (76 mm) flex pipe from the stove to the top of the chimney (see "Installation - Hearth Mount Installation - Freestanding").

#### POSITIVE FLUE CONNECTION WITHOUT A FULL RELINE - FIREPLACE INSERT (USA ONLY):

This unit does not require a full reline (in USA only) when installing into a masonry fireplace, however, it is recommended to ensure proper drafting of the appliance.

IMPORTANT: Ensure the chimney and firebox are cleaned and free of all debris, including soot and ashes, before proceeding with this installation. If it is not clean soot maybe blown into the room through the unit's blower. Ensure the fireplace and chimney have not deteriorated in any way. If there is any sign of corrosion or damage in the chimney the unit can not be installed. This unit can be installing in a masonry fireplace built to (UBC 37 or ULC S628 standards) or a factory built fireplace (built to UL 127 or ULC S610 standards).

- 1. If installing the Empress with a skirt, the skirt must be installed before the installation.
- 2. Install the hearth pad. The floor 6" (150 mm) in front of the unit and 6" (150 mm) to each side of the unit must be protected with a non-combustible hearth pad.
- 3. The vent connector from the insert must extend a minimum of 18" above the chimney seal plate. The chimney seal plate area must be sealed to prevent the exhaust from the chimney from coming back

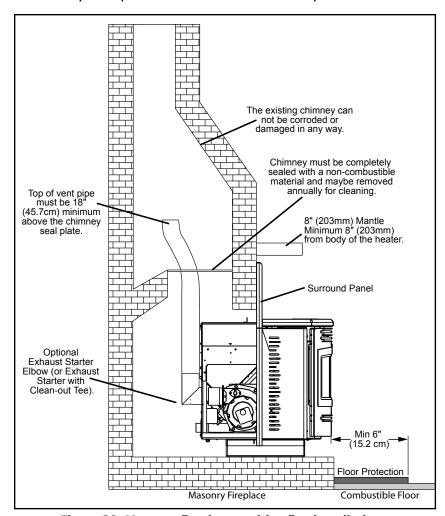


Figure 30: Masonry fireplace positive flue installation.

into the fireplace and prevent air from the fireplace from entering the chimney which will affect proper drafting of appliance.

A qualified installer should evaluate the existing fireplace to determine the best method for achieving a positive flue connection between the vent pipe or liner and the chimney. Whatever method used must effectively seal the area to prevent room air passage to the chimney cavity of the fireplace. A couple examples of Approved Methods of Achieving a Positive Flue Connection are:

- a) Secure a seal-off plate (i.e. 22-gage sheet steel) in the masonry fireplace throat using masonry screws.
- b) Pack non-combustible material (i.e. rockwool) around the vent pipe or using a flue adapter.
- 4. Set leveling leg to approximate height.
- 5. Connect the Exhaust Starter Quick Connect, straight or elbow, to the exhaust pipe.

**IMPORTANT:** The chimney seal plate must be removed for the annually chimney cleaning as ash will build up on top of the plate.

#### INSTALLATION AND REMOVAL OF CONTROL PANEL IN THE SURROUND PANEL - FIREPLACE INSERT:

When installing the circuit board control panel into the surround panel, the surround does not need to be assembled. The circuit board will be found in the firebox.

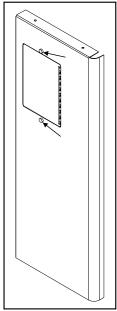


Figure 31: Right Panel - Front.

Place the circuit board control panel on the backside of the right surround panel so the hinge is on the outside and the top and bottom holes on the control panel line up with those on the surround. Attach using two (2) T-20 screws through the front of the surround into the circuit board control panel (see Figure 31).

After the surround has been assembled and is ready to be installed on the unit plug the wiring harness into the control panel (see Figure 32).

#### **REMOVAL:**

When maintenance is required on the unit the surround must be removed. Pull the surround straight up till it stops then pull it out about 4" (10 cm) and rest the surround on top of the unit while the control panel is removed or disconnected.

If electrical connection is required for the maintenance remove the circuit board control panel from the surround.

If electrical connection is not required for the maintenance remove the wiring harness from the bottom of the circuit board control.

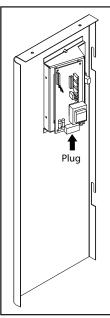


Figure 32: Right Panel - Back.

#### ASSEMBLY AND INSTALLATION OF INSERT SURROUND PANELS - FIREPLACE INSERT:

The trim set for your surround panel must be installed before installing the surround panel onto the unit, if not already done.

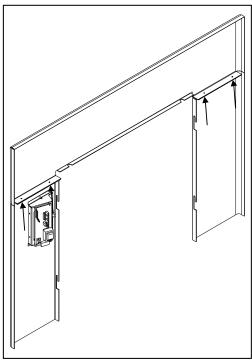


Figure 33: Assembled Surround Panel.

1. To assemble the surround panels, lay the panels face down on a soft flat surface and align the outer edges of the sides with the top panel. Using four (4) T-20 screws up through the side panels into the top (see Figure 33).

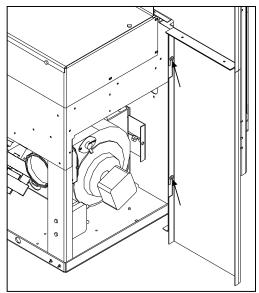


Figure 34: Installed Surround Panel.

2. Place the assembled surround panel around the stove; align the slots with the screw heads. Push surround in then down to engage the surround slots on the mounting screws (see Figure 34). Make sure the top surround panel sits flat behind the stove top.

#### PLATED TRIM INSTALLATION:

#### TO AVOID PERSONAL INJURY DO NOT REMOVE OR REPLACE TRIMS WHEN PELLET STOVE IS HOT!

#### KIT COMPONENTS:

Quantity	Description
2	Upper Cabinet Trim
2	Lower Cabinet Trim
1	Top Trim
3	Louver
4	#8 nut plated (spares)

#### TOOLS REQUIRED:

• T-20 screwdriver •11/32" socket

# Upper Cabinet Trim Left Cabinet Side Lower Cabinet Trim #8 Hex Nut (x8) #8 Stud (x8)

Figure 35: Right cab side with upper and lower cabinet trims.

#### REMOVAL OF SIDE TRIMS:

When stove is off and cool, open the door. Remove the two (2) screws on the right cab side (at top and bottom of front flange) and the two (2) screws on the left cab side (one above and one below hinge). The cab sides have hinges at the back so they can swing open when the screws have been removed.

Remove the trims that will be replaced by unfastening the #8 hex nuts (four (4) for each piece of trim) by hand. Carefully remove the trim from the studs.

#### REPLACEMENT OF SIDE TRIMS:

Place the new trim pieces on their corresponding studs and finger tighten the #8 hex nuts (four (4) for each piece of trim). Refer to Figure 35.

Close both cab sides and replace the two (2) screws on each side.

#### REMOVAL OF TOP TRIM:

With door open, undo the two (2) screws on the underside of the top there are visible under the angled corners. Open the hopper lid, remove the two (2) screws that are found attached to the top under the hopper lid. Pull top forward, lift the top front piece off the stove and turn it over. Remove the six (6) #8 hex nuts and pull the trim off the studs.

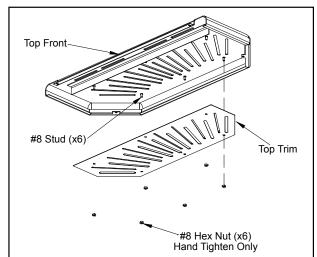


Figure 36: Top front with top trim

#### REPLACEMENT OF THE TOP TRIM:

Place the new trim on its corresponding studs (see Figure 36) and finger tighten the six (6) #8 hex nuts.

Replace top front on top of the stove, remembering to hook the two (2) front tabs under the corresponding tabs on the stove. Replace the two (2) screws on the top under the hopper lid then close lid. Replace the two (2) screws under the corner lips above the door. Align top then tighten screws.

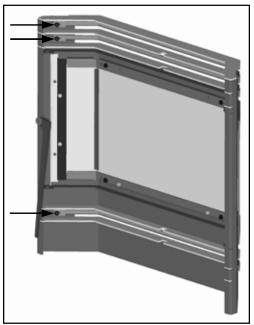


Figure 37: Door with louvers.

#### REMOVAL OF LOUVER BAR SET:

Door must be open. The three (3) arrows in Figure 37 point to three (3) of the nuts that hold the louvers on. There are three nuts on each end. Remove the six nuts by hand; if the nuts are tight, a  $^{11}/_{32}$ " socket can be used. When removing the louvers, pull one end of the louver up over the stud. If it is difficult to remove the louver, push on one side from the front, then pull the other end off the second stud.

#### REPLACEMENT OF LOUVER BAR SET:

Place one slotted end of new louver over a stud, then slide the other slot over the corresponding stud; replace the nuts and hand tighten. Close door when all three louvers are replaced.

Clean all plated surfaces before starting the stove. See CLEANING PLATED SURFACES IN ROUTINE CLEANING AND MAINTENANCE IN the Owner's Manual.

#### PLATED DOOR INSTALLATION:

#### TO AVOID PERSONAL INJURY DO NOT REMOVE OR REPLACE COVER WHEN PELLET STOVE IS HOT!

TOOLS REQUIRED:

•11/32" socket or wrench

#### REMOVAL OF DOOR COVER:

When stove is off and cool, open the door. Remove the four (4) #8 hex nuts around the inside of the glass retainer shown in Figure 38.

Remove door cover from door by gently sliding the studs out of the holes. If it is difficult to remove the cover, the glass retainer may be pinching the threads on the studs. Slightly loosen the four (4) screws (by each of the studs).

#### REPLACEMENT OF DOOR COVER:

Slide new door cover into place and hand tighten the four (4) #8 hex nuts around the inside of the glass retainer. Ensure the four screws are also hand tight and close door.

Clean all plated surfaces before starting the stove. See CLEANING PLATED SURFACES IN ROUTINE CLEANING AND MAINTENANCE IN the Owner's Manual.

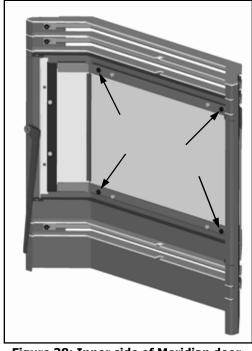


Figure 38: Inner side of Meridian door.

#### THERMOSTAT INSTALLATION:

1. Install the wall thermostat in a location that is not to close too the unit but will effectively heat the desired area.

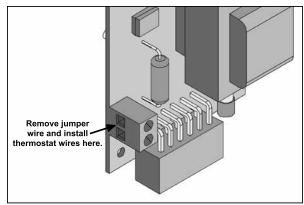


Figure 39: Thermostat wire placement.

2. Install a 12 or 24 Volt Thermostat using an 18 x 2 gauge wire from the unit to the thermostat.

If the unit has been placed in the HI / LOW mode, the unit will be taken to a low or idle setting when the thermostat is not calling for heat. When the thermostat calls for heat, the unit will go to the setting that is displayed on the control board Heat Indicator. If the heating load is not great enough when the stove is on low, the high limit switch will turn the stove off and the switch will have to be manually reset. To reset the high limit switch, remove the right cabinet side. The switch is found behind the control panel. Avoid setting off the high limit switch.

#### SLIDER/DAMPER SET-UP:

# THE SLIDER / DAMPER MUST BE SET AT TIME OF INSTALLATION, IT IS USED TO REGULATE THE AIRFLOW THROUGH THE PELLET STOVE.

#### A Qualified Service Technician or Installer must set the Slider Damper.

The slider damper is used to regulate the airflow through the pellet stove and is located behind the left cab side (refer to Figure 40). The door must be open for the cab side to be removed on all models. On freestanding model loosen the two T-20 torx screws, one above and one below hinge, swing open left panel to access. On insert model remove the two (2) T-20 torx screws on the front, one above and one below hinge, and the one T-20 at the top of the cab side under the top front.

The combustion exhaust blower is a variable speed blower controlled by the heat output button. This

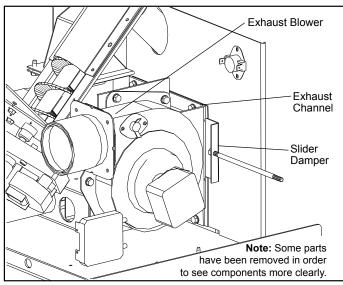


Figure 40: Slider / Damper

blower will decrease the vacuum pressure inside the stove and as the heat output button is turned down. The vacuum pressure inside the firebox will increase as the combustion exhaust blower increases in speed (higher heat output setting).

If the fire should happen to go out and the heat output indicator has been set on the lowest setting, the Slider Damper should be pushed in slightly, decreasing the air in the firebox.

If, after long periods of burning, the fire builds up and overflows the burn pot or there is a build up of clinkers, this would be a sign that the pellet quality is poor, this requires more primary air, the slider damper must be pulled out to compensate. Pulling the slider damper out gives the fire more air.

The easiest way to make sure that an efficient flame is achieved is to understand the characteristics of the fire.

- A tall, lazy flame with dark orange tips requires more air – Open slider (pull out) slightly.
- A short, brisk flame, like a blowtorch, has too much air
   Close slider (push in) slightly.
- If the flame is in the middle of these two characteristics with a bright yellow/orange, active flame with no black tips then the air is set for proper operation.

#### **SPECIAL NOTES:**

Pellet quality is a major factor in how the Pellet stove will operate. If the pellets have a high moisture content or ash content the fire will be less efficient and has a higher possibility of the fire building up and creating clinkers (hard ash build-up).

Taking a reading of vacuum pressure inside the firebox with a magnehelic gauge can be used to set the slider for best combustion. The slider damper should be set only on a hot stove (operating for thirty (30) minutes or more) by placing a Magnahelic Pressure Gauge in the firebox. The reading can be taken from the ½" (3 mm) hole located in the front of the firebox under the door (see Figure 42). The best settings are a reading of approximately 0.10 inches of water column on the high fire setting. Some fuels may require higher or lower settings.



Figure 41: Efficient Flame.

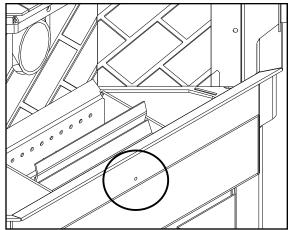


Figure 42: Hole for Pressure test with Magnehelic Gauge.

#### TROUBLESHOOTING

#### DO NOT:

- Service the stove with wet hands. The stove is an electrical appliance, which may pose a shock hazard if handled improperly. Only qualified technicians should deal with possible internal electrical failures.
- Do not remove from the firebox any screws without penetrating oil lubrication.

#### WHAT TO DO IF:

- 1. The stove will not start.
- 2. The stove will not operate when hot.
- 3. The exhaust blower will not function normally.
- 4. Light # 2 on Heat output bar flashing.
- 5. Auger light flashes but auger motor does not turn at all
- 6. The 200 °F (93 °C) high limit temperature sensor has tripped.
- 7. The convection blower will not function normally.
- 8. Ignitor- the pellets will not light.
- 9. Control settings (Heat Level) has no effect on the fire.
- 10. The stove keeps going out.

# \*NOTE: All troubleshooting procedures should be carried out by qualified technicians or installers.

#### 1. The stove will not start.

- ✓ Make sure the stove is plugged in and the wall outlet is supplying power.
- ✓ If the Control Board has been placed in the ON /OFF thermostat mode, then turn the thermostat up to call for heat.
- ✓ Ensure the burn pot liner is correctly placed in the burn pot
- ✓ Check the Heat Level Indicator. If the # 2 light is flashing (see the # 2 light is flashing)
- ✓ Check the fuse on the circuit board.
- ✓ If the unit still does not start, contact your local service dealer for service.

#### 2. The stove will not operate when hot.

- ✓ Check the Heat Level Indicator if a fire is not detected, or if the fire has gone out **the #3 light will flash** because the Exhaust Temperature Sensor's contacts have opened.
- ✓ Check the hopper for fuel.
- ✓Incorrect air damper setting. Excessive air may consume the fire too quickly before the next drop of fuel, leaving completely unburned fuel in the burn pot liner. Insufficient air will cause build up, further restricting the air flow through the Burn Pot Liner. This in turn will cause the fuel to burn cold and very slowly. Fuel may build up and smother the fire. In this case clean the burn pot. (NOTE: unit may require a change to the vent system or installation of fresh air to correct Air to Fuel ratio problems).
- ✓ Combustion Blower failure. The Combustion Blower is not turning fast enough to generate the proper vacuum in the fire box. Visual Check is the blower motor turning.
- ✓ Check the Exhaust Blower voltage across the blower wires (>=114 V on #5 setting and >= 82 on #1 setting). Replace the Circuit Board if the Voltage reading is less than 82 V. with a line voltage >115 V AC.

#### TROUBLESHOOTING

✓ Check Vacuum levels in the exhaust channel by bypassing the Vacuum Switch, then remove the Vacuum hose from Vacuum Switch. Check exhaust vacuum readings by placing the open end of the Vacuum Hose on a Magnahelic Gauge (readings must be above .10″ W.C. on low fire).

If the motor fails to reach a 0.10" W.C. readings, then replace the Combustion Blower.

- ✓Poor Quality Fuel Insufficient energy in the fuel to produce enough heat to keep the stove burning or operational.
- ✓ Exhaust Temperature Sensor failure. Bypass sensor located on Exhaust Blower if stove now operates properly, the unit may require cleaning or a new sensor. Contact your local dealer for service.
- ✓ Check the fuse on the circuit board.

#### 3. The exhaust motor will not function normally.

- ✓ Open the left side access panel; check all connections against the wiring diagram.
- ✓ See "2. The stove will not operate when hot." section.

#### 4. Light # 2 on Heat output bar flashing

(The Vacuum Switch contacts have opened for more than 15 sec.)

- ✓ Pinch, break or blockage in Vacuum Hose Check hose for pinch points or damage, replace or re-route as required. Blow out Vacuum Hose
- ✓ Blocked Hose Barb on Exhaust Channel Use a paper clip to clean out Hose Barb or remove the Vacuum Hose from the Vacuum Switch and blow into the hose to remove blockage.
- ✓ Blocked exhaust / venting system Have stove and venting cleaned and inspected.
- ✓ Severe negative pressure in area where unit is installed Check the operation by opening a window, does this solve the problem? If it does, install fresh air intake to unit or room. Venting system may require vertical section to move termination into a low pressure zone.
- ✓ Vacuum Switch failure Bypass the vacuum switch, if this corrects the problem check for above problems before replacing the Vacuum Switch.
- ✓ Damage to gray wires between Circuit Board and Vacuum Switch Inspect wires and connectors
- ✓ Combustion Blower failure The Combustion Blower is not turning fast enough to generate the proper vacuum in the Exhaust Channel. Visual Check; is the blower motor turning? Check the Exhaust Blower voltage across the blower wires (>=114 V on #5 setting and >= 82 V on #1 setting). − Replace the Circuit Board if the Voltage reading is less than 82 V. with a line voltage >114 V AC.
- ✓ Check Vacuum levels in the exhaust channel by bypassing the vacuum switch, then remove the Vacuum hose from Vacuum Switch. Check exhaust vacuum readings by placing the open end of the Vacuum Hose on a Magnahelic Gauge. (readings must be above .10″ W.C. on low fire).

If the motor fails to reach a 0.10" W.C. readings, then replace the Combustion Blower

#### To reset Circuit Board after a trouble code - push the ON/OFF button

#### 5. Auger light flashes but auger motor does not turn at all.

- ✓ If the Auger gear box does not turn but the motor's armature does try to spin then the auger is jammed.

   Try to break apart jam by poking at the jam through the drop tube. If this fails then empty the hopper and remove the Auger Cover \*\*Remember to re-seal the cover after installation\*\*
- ✓ Check the fuse on the circuit board.

#### TROUBLESHOOTING

#### 6. The 200 °F ( 93 °C) high limit temperature sensor has tripped.

- ✓ Reset sensor and determine cause was it Convection Blower failure or 160 °F (71 °C) Temperature Sensor failure? Bypass the 160 °F (71 °C) sensor, does the Convection blower come on high if not replace the blower? If yes, replace sensor (located on the left side of the firewall).
- ✓ Check the fuse on the circuit board.

#### 7. The convection blower will not function normally.

- ✓ Clean all grill openings at the back and below unit .
- ✓ Press the fan button; does the fan come on? Press again to verify that the blower turns on; if, not contact your local dealer for service.

#### 8. Ignitor- the pellets will not light.

- ✓ Everything else in the stove operates but the ignitor will not light the pellets.
- ✓ Make sure the burn pot liner is up tight and square to the ignitor tube by pushing the burn pot back against the ignitor tube.
- ✓ Check to see if the exhaust blower is operating. If not, contact your local dealer for service.
- ✓ Check the fuse on the circuit board.

**NOTE:** The ignitor should be bright orange in color. If not replace the ignitor.

#### 9. Control settings (Heat Level) has no effect on the fire.

- ✓ NOTE: If the system light is flashing the Control Board has complete control of the unit. When the units system light becomes solid then control of the unit is given back to the operator.
- ✓ If there is no control of the Heat Level button make sure the thermostat is calling for heat.
- ✓ Call your local dealer for service.

#### 10. The stove keeps going out.

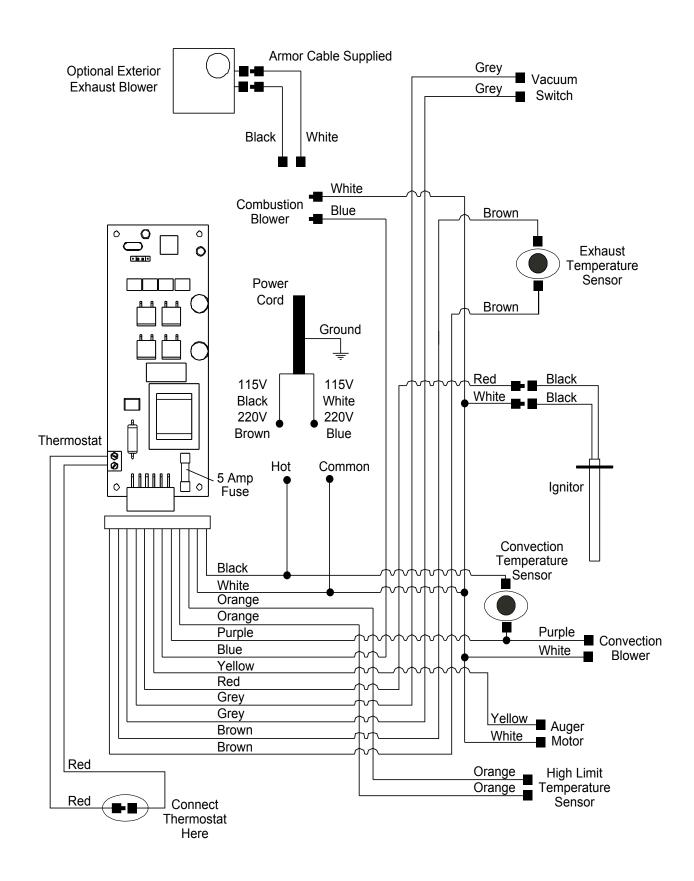
If the stove goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot liner, the fire is going out before the stove shuts off.

- ✓ Check to see that the Slider / Damper is in the correct position.
- √Turn the Heat Level up slightly (poor quality pellets will require slightly higher settings).
- ✓ Set the auger trim till the #1 and #5 lights are illuminated.

If the stove goes out and there are partially burned pellets left in the burn pot liner, the stove has shut down due to a lack of air, exhaust temperature, or power failure.

- ✓Adjust the Slider / Damper.
- ✓ Check to see if the stove needs a more complete cleaning.
- ✓Turn the Heat Level up slightly (poor quality pellets will require slightly higher settings).
- ✓ Did the power go out?
- ✓ Contact your local Dealer for service.

# WIRING DIAGRAM



# PARTS LIST - COMPONENTS

Reference Number	Description	Part Number
1	120 °F (49 °C) Ceramic Fan Temperature Sensor	EC-001
	Domestic Power Cord - 115V	EC-042
2	Auger Motor - 115V	EF-001
3	Convection Blower 115V	EF-002
4	Fan Temp Sensor 160 °F (71 °C)	EF-013
5	High Limit Temp Sensor 200 °F (93 °C) Manual Reset	EF-016
6	Vacuum Switch - 115V	EF-017
	Silicone Hose	EF-018
	Aluminum Hose Barb	EF-019
7	Auger	EF-025
8	Door Handle Complete	EF-028
9	Slider Damper Rod with Knob	EF-050
10	Glass Set with Tape	EF-062
11	Slider Damper Plate	EF-064
12	Brass Auger Bushing	EF-065
13	Ash Pan Latch (Freestanding)	EF-178
	Pedestal & Ash Pan Gasket - 10' (305 cm)	EF-208
	External Exhaust Back	EF5-143
	External Exhaust Box	EF5-144
	External Exhaust Bottom	EF5-145
	45° Exhaust Adaptor	EF5-146
	Exhaust Starter Tube 3" x 21/2" Long	EF5-147
	Log Set	20-036
14	Control Panel Door	20-040
	External Exhaust Kit (3" pipe)	20-070
	60° Exterior Exhaust Adaptor	50-096
15	Circuit Board 5 Amp Fuses - 115V (Pair)	50-833
16	Control Panel Touch Latch	50-323
	Circuit Board Stand Offs	50-331

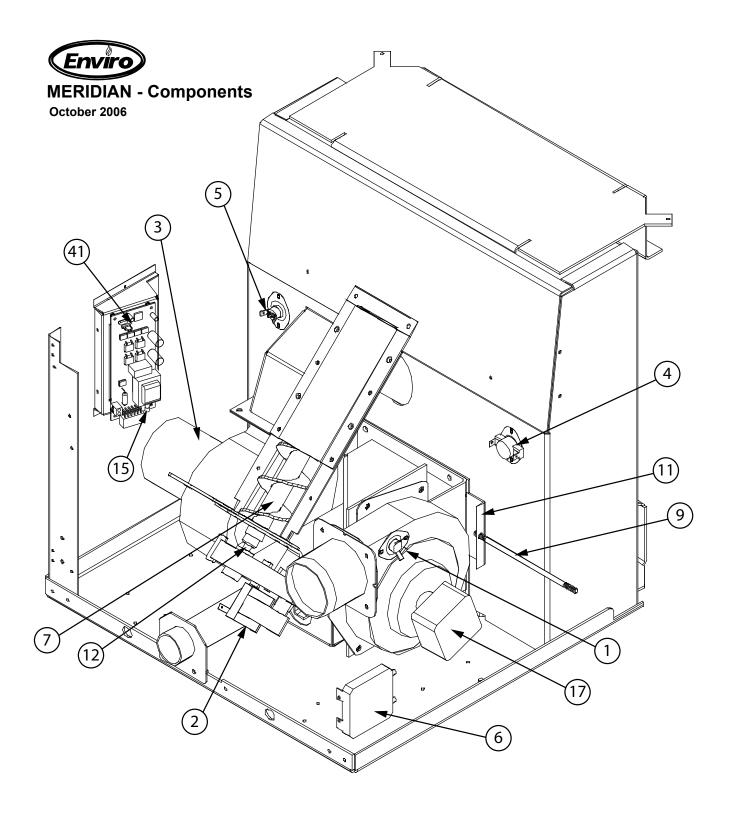
# PARTS LIST - COMPONENTS

Reference Number	Description	Part Number
17	Combustion/ Exhaust Blower - 115V	50-473
18	Stainless Steel Burn Pot Liner - Standard	50-474
18	Stainless Steel Burn Pot Liner - High Ash	50-587
19	Flush Handle for Hopper Lid (Freestanding)	50-523
20	Door	50-653
21	Burn Pot	50-658
22	Ash Pan (Freestanding)	50-659
23	Pedestal (Freestanding)	50-660
24	Cabinet Side Left (Freestanding)	50-661
25	Cabinet Side Right (Freestanding)	50-670
26	Back Grill (Freestanding)	50-675
27	Hopper Lid (Freestanding)	50-676
28	Top Front (Freestanding)	50-677
29	Tube Cleaner Rod	50-680
30	Brick Panel Set	50-681
31	Brick Retainer Set	50-682
	Owner's Manual - 115V	50-765
	Technical Manual - 115V	50-1485
32	Cabinet Side - Left (Insert)	50-823
33	Cabinet Side - Right (Insert)	50-824
34	Top Front (Insert)	50-825
35	Ash Pan (Insert)	50-826
36	Hopper Lid (Insert)	50-827
37	Hopper Cover (Insert)	50-828
38	300 Watt Ignitor 115V	50-1067
39	Circuit Board Control Panel with Decal	50-1475
	Circuit Board Decal	50-1476
40	Circuit Board with Thermostat Switch - 115V	50-1477

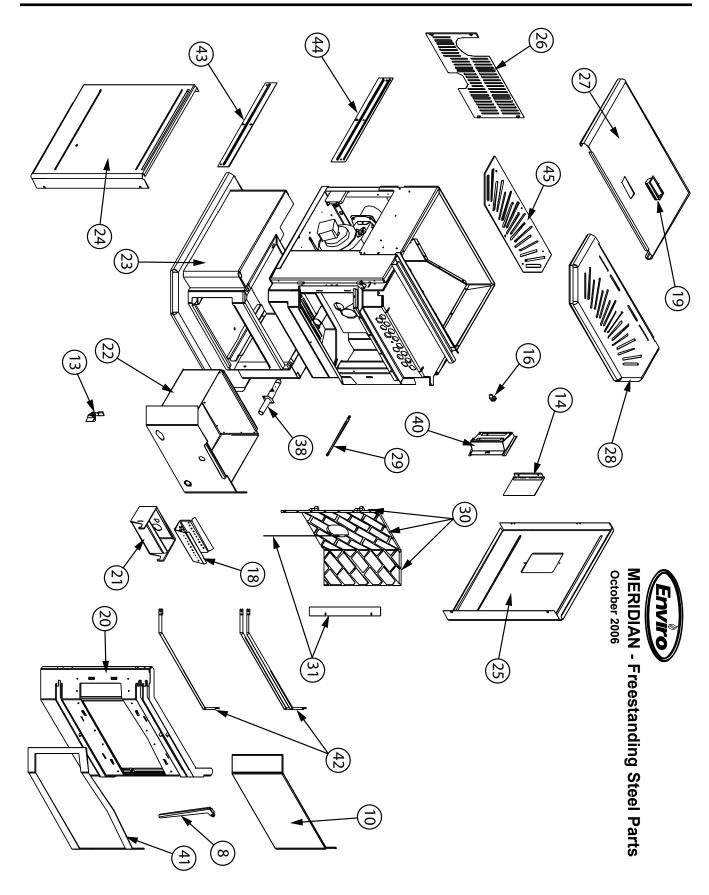
# PARTS LIST - OPTIONS

Reference Number	Description	Part Number
	Body Trim Kit - Pewter (Freestanding)	50-620
	Body Trim Kit - Gold (Freestanding)	50-621
	Body Trim Kit - Antique Copper (Freestanding)	50-622
41	Door Cover - Painted	50-683
41	Door Cover - Pewter	50-623
41	Door Cover - Gold	50-624
41	Door Cover - Antique Copper	50-625
42	Louver Bar Set - Painted	50-654
42	Louver Bar Set - Gold	50-655
42	Louver Bar Set - Pewter	50-656
42	Louver Bar Set - Antique Copper	50-657
43	Lower Cabinet Trim (1 piece) - Painted (Freestanding)	50-662
43	Lower Cabinet Trim (1 piece) - Gold (Freestanding)	50-663
43	Lower Cabinet Trim (1 piece) - Pewter (Freestanding)	50-664
43	Lower Cabinet Trim (1 piece) - Antique Copper (Freestanding)	50-665
44	Upper Cabinet Trim (1 piece) - Painted (Freestanding)	50-666
44	Upper Cabinet Trim (1 piece) - Gold (Freestanding)	50-667
44	Upper Cabinet Trim (1 piece) - Pewter (Freestanding)	50-668
44	Upper Cabinet Trim (1 piece) - Antique Copper (Freestanding)	50-669
45	Top Trim - Painted	50-671
45	Top Trim - Gold	50-672
45	Top Trim - Pewter	50-673
45	Top Trim - Antique Copper	50-674
46	Regular Panel Set (Insert)	50-769
47	Oversized Panel Set (Insert)	50-770
	Trim Kit - Pewter (Insert)	50-771
	Trim Kit - Antique Copper (Insert)	50-772
	Trim Kit - Gold (Insert)	50-773
48	Regular Panel - Left (Insert)	50-817
49	Regular Panel - Right (Insert)	50-818
50	Regular Panel - Top (Insert)	50-819
51	Oversized Panel - Left (Insert)	50-820
52	Oversized Panel - Right (Insert)	50-821
53	Oversized Panel - Top (Insert)	50-822

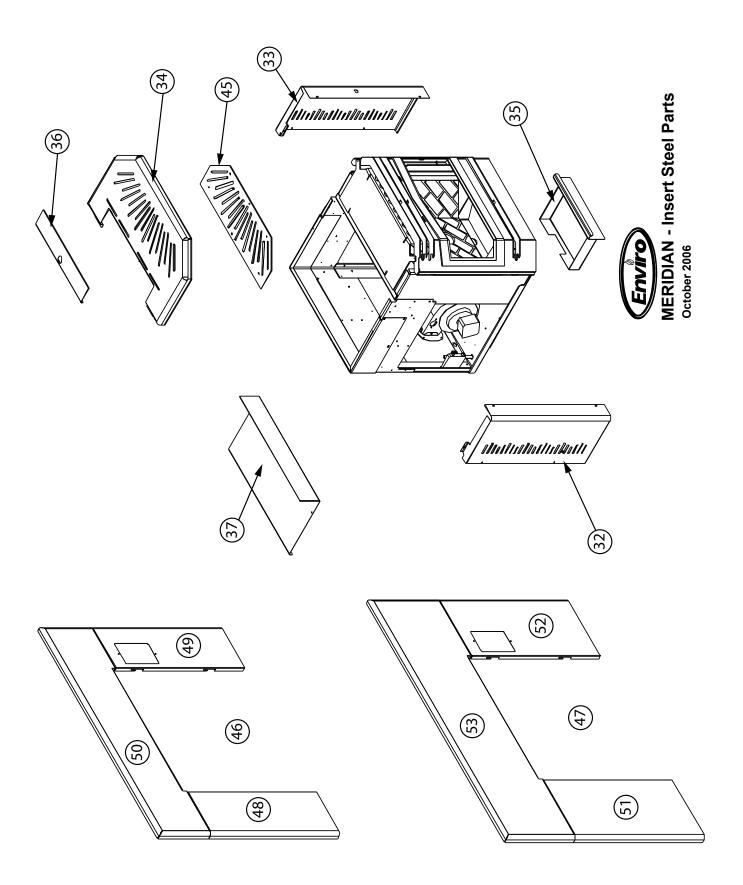
# PARTS DIAGRAM - COMPONENTS



# PARTS DIAGRAM - FREESTANDING STEEL



# PARTS DIAGRAM - INSERT STEEL



#### WARRANTY

Sherwood Industries Ltd. is the manufacturer of the Enviro line of heating products. At Sherwood Industries, our commitment to the highest level of quality and customer service is the most important thing we do. Each Enviro stove is built on a tradition of using only the finest materials and is backed by our Exclusive Lifetime Limited Warranty to the original purchaser. With Enviro, you're not just buying a stove, you're buying a company with years of unequalled performance and quality.

#### **Limited Lifetime Warranty:**

Under this warranty, Sherwood Industries Ltd. covers the fireplace or stove body and accessories against defects in materials and workmanship, for part repair or replacement for the first seven (7) years and limited labour for the first two (2) years to the original purchaser. This Warranty covers: Firebox, Heat Exchanger, Burn Pot, Firebox Panels, Ceramic Glass, Pedestals, Panels, Legs, and Door Assembly. Please see the exclusions and limitation section below as certain restrictions and exclusions apply to this warranty.

#### **Limited Three (3) Year Warranty**

Under this warranty, Sherwood Industries Ltd. covers the Burn Pot Liner and Log Sets against defects in materials and workmanship, for part repair or replacement for the first three (3) years and limited labour for the first two (2) years to the original purchaser. Please see the exclusions and limitation section below as certain restrictions and exclusions apply to this warranty.

#### Limited Two (2) Year Warranty:

Under this warranty, Sherwood Industries Ltd. covers: Ignitor, Auger Motor, Circuit Board, Timers, Temp Sensors, Blowers, Vacuum Switch and Wire Harness, against defects in materials and workmanship, for part repair or replacement for the first two (2) years and limited labour for the first two (2) years to the original purchaser. Please see the exclusions and limitation section below as certain restrictions and exclusions apply to this warranty.

#### Limited One (1) Year Warranty:

Under this warranty, Sherwood Industries Ltd. covers all exterior surface finishes against defects in materials and workmanship, for part repair or replacement and limited labour for the first (1) year to the original purchaser. Please see the exclusions and limitation section below as certain restrictions and exclusions apply to this warranty.

#### Here is how our Warranty works

If you have any concerns with your Enviro product please contact the dealer where you purchased the fireplace or stove. Your dealer shall make all claims under this warranty in writing.

#### **To the Dealer**

When filling out a warranty claim please complete the following information on an official warranty claim form: Customer information: Name, address and telephone number of purchaser and date of purchase.

Dealer information: Date of installation, name of installer and dealer, serial number of the appliance, nature of complaint, defects or malfunction, description and part numbers of any parts replaced.

#### To the Distributor

Sign and verify that work and information are correct.

#### **Exclusions and Limitations:**

- 1. This Warranty does not cover tarnish, discoloration or wear on the plating or paint.
- 2. This Warranty excludes wear and tear or breakage caused by cleaning, moving or service on log set.
- 3. A qualified installer must install this stove or fireplace. This Limited Warranty covers defects in materials and workmanship only if the product has been installed in accordance with local building and fire codes; in their absence, refer to the owner's manual. If the product is damaged or broken as a result of any alteration, willful abuse, mishandling, accident, neglect, or misuse of the product, the Limited Warranty does not apply.
- 4. The stove must be operated and maintained at all times in accordance with the instructions in the Owner's Manual. If the unit shows signs of neglect or misuse, it is not covered under the terms of this Warranty policy. Performance problems due to operator error will not be covered by the Limited Warranty policy.
- 5. As this is a heating appliance some changes in colour of surface finishes may occur. This is not a flaw and as such is not covered under this warranty.

#### WARRANTY

- 6. Some minor expansion, contraction, or movement of certain parts and resulting noise, is normal and not a defect and, therefore, is not covered under this Limited Warranty.
- 7. Misuse includes over-firing. Over-firing this appliance can cause serious damage and will nullify the Limited Warranty.
- 8. The Limited Warranty will cover glass thermal breakage only and will not cover misuse of the stove glass, including but not limited to glass that is struck, has surface contaminates or has had harsh or abrasive cleaners used on it.
- 9. This warranty does not cover products made or provided by other manufacturers and used in conjunction with the operation of this stove without prior authorization from Sherwood Industries Ltd. The use of such products may nullify the Limited Warranty on this stove. If unsure as to the extent of this Limited Warranty, contact your authorized Enviro dealer before installation.
- 10. Sherwood Industries Ltd. will not be responsible for inadequate performance caused by environmental conditions.
- 11. The Limited Warranty does not cover installation and operational related problems such as spillage caused by environmental conditions. Environmental conditions include but are not limited to nearby trees, buildings, roof tops, wind, hills, mountains, inadequate venting or ventilation, excessive offsets, negative air pressures or other influences caused by mechanical systems such as furnaces, fans, clothes dryers etc.
- 12. The Limited Warranty is void if:
  - a) The stove has been operated in atmospheres contaminated by chlorine, fluorine or other damaging chemicals.
  - b) The stove is subject to submersion in water or prolonged periods of dampness or condensation.
  - c) Any damage to the unit, combustion chamber or other components due to water, or weather damage which is the result of, but not limited to, improper chimney/venting installation.
  - c) Salt air in coastal areas or high humidity can be corrosive to the finish; these environments can cause rusting. Damage caused by salt air or high humidity is not covered by the Limited Warranty.
- 13. Exclusions to the Limited Warranty include: injury, loss of use, damage, failure to function due to accident, negligence, misuse, improper installation, alteration or adjustment of the manufacturer's settings of components, lack of proper and regular maintenance, alteration, or act of God.
- 14. The Limited Warranty does not cover damage caused to the fireplace or stove while in transit. If this occurs, do not operate the stove and contact your courier and/or dealer.
- 15. The Limited Warranty does not extend to or include firebox paint, door or glass gaskets with damage caused by normal wear and tear, or exterior paint discoloration or chipping, worn gaskets, etc.
- 16. The Limited Warranty does not include damage to the unit caused by abuse, improper installation, or modification of the unit.
- 17. Damage to plated surfaces caused by fingerprints, scratches, melted items, or other external scores and residues left on the plated surfaces from the use of abrasive cleaners or polishes is not covered in this warranty.
- 18. The Limited Warranty does not cover tarnish, discoloration or wear on the plated surfaces.
- 19. The paint on the Metal Brick Liner may peel. This is due to the extreme conditions applied to the paint during normal usage. It is not a flaw and is not covered under warranty.
- 20. Sherwood Industries Ltd. is free of liability for any damages caused by the fireplace or stove, as well as inconvenience expenses and materials. The Limited Warranty does not cover incidental or consequential damages.
- 21. The Limited Warranty does not cover any loss or damage incurred by the use or removal of any component or apparatus to or from the Enviro fireplace or stove without the express written permission of Sherwood Industries Ltd. and bearing a Sherwood Industries Ltd. label of approval.
- 22. Any statement or representation of Enviro products and their performance contained in Enviro advertising, packaging literature, or printed material is not part of the Limited Warranty.
- 23. The Limited Warranty is automatically voided if the fireplace or stove's serial number has been removed or altered in any way. If the stove is used for commercial purposes, it is excluded from the Limited Warranty.
- 24. No dealer, distributor, or similar person has the authority to represent or warrant Enviro products beyond the terms contained within the Limited Warranty. Sherwood Industries Ltd. assumes no liability for such warranties or representations.
- 25. Sherwood Industries Ltd. will not cover the cost of the removal or re-installation of the stove, hearth, facing, mantels, venting or other components.
- 26. Labour to replace or repair items under this Limited Warranty will be covered per our warranty service fee reimbursement schedule. Labour rates are set per component and as such total labour costs may not be covered.
- 27. Sherwood Industries Ltd. is not liable for freight or labour on any stove replaced in-field and is not liable for travel costs for service work. In the event of in-home repair work, the customer will pay any in-home travel fees or service charges required by the Authorized Dealer.
- 28. At no time will Sherwood Industries Ltd. be liable for any consequential damages which exceed the purchase price of the unit. Sherwood Industries Ltd. has no obligation to enhance or modify any stove once manufactured (example: as a stove evolves, field modifications or upgrades will not be performed).
- 29. This Limited Warranty is applicable only to the original purchaser and it is non-transferable.
- 30. This warranty only covers Enviro products that are purchased through an authorized Enviro dealer.
- 31. If for any reason any section of the Limited Warranty is declared invalid, the balance of the warranty remains in effect and all other clauses shall remain in effect.
- 32. The Limited Warranty is the only warranty supplied by Sherwood Industries Ltd., the manufacturer of the stove. All other warranties, whether express or implied, are hereby expressly disclaimed and purchaser's recourse is expressly limited to the Limited Warranty.
- 33. Sherwood Industries Ltd. and its employees or representatives will not assume any damages, either directly or indirectly, caused by improper usage, operation, installation, servicing or maintenance of this stove.
- 34. Sherwood Industries Ltd. reserves the right to make changes without notice. Please complete and mail the warranty registration card and have the installer fill in the installation data sheet in the back of the manual for warranty and future reference.
- 35. Sherwood Industries Ltd. is responsible for stocking parts for a maximum of seven (7) years after discontinuing the manufacture or incorporation of the item into its products. An exception to this would be if an OEM supplier is not able to supply a part.

# INSTALLATION DATA SHEET

The following information must be recorded by the installer for warranty purposes and future reference.

NAME OF OWNER:	NAME OF DEALER:
ADDRESS:	ADDRESS:
PHONE:	PHONE:
MODEL:	NAME OF INSTALLER:
SERIAL NUMBER:	
DATE OF PURCHASE: (dd/mm/yyyy)	
DATE OF INSTALLATION:(dd/mm/yyyy)	ADDRESS:
MAGNEHELIC AT INSTALL:	
INSTALLER'S SIGNATURE:	
	PHONE:

MANUFACTURED BY:
SHERWOOD INDUSTRIES LTD.
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3
www.envirofire.biz
March 1, 2010
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