

IMPORTANT:
THESE INSTRUCTIONS ARE TO
REMAIN WITH THE HOMEOWNER
SAVE THESE INSTRUCTIONS



SERIAL #

SAFETY NOTICE

If this stove is not properly installed, a house fire may result. For your safety, follow the installation directions. Consult local building or officials about restrictions and installation inspection requirements in your area.

Summit Wood Insert INSTALLATION AND OPERATING INSTRUCTIONS

**TESTED and LISTED
to ULC S628 / UL 1482**

Meets the U.S. Environmental Protection Agency's July 1990 Particulate Emission Standards



**MODEL:
SUMMIT INSERT
SERIES - B**



Contents

NOTE:
WE STRONGLY RECOMMEND THAT SMOKE DETECTORS BE INSTALLED.

If smoke detectors have been previously installed, you may notice that they are operating more frequently. This may be due to curing of stove paint or fumes caused by accidentally leaving the fire door open. Do not disconnect the detectors. If necessary, relocate them to reduce their sensitivity.

SAFETY NOTICE:

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Please read this entire manual before you install and use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death.

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Safety

Please read this entire manual before installation and use of this wood burning insert. Failure to follow these instructions could result in property damage, bodily injury or even death.

We strongly recommend that smoke detectors be installed. If smoke detectors have been previously installed, you may notice that they are operating more frequently. This may be due to curing of stove paint or fumes caused by accidentally leaving the fire door open. Do not disconnect the detectors. If necessary, relocate them to reduce their sensitivity.

SAFETY NOTICE: If this stove is not properly installed, a house fire may result. For your safety, follow the installation directions. Consult local building or fire officials about restrictions and installation inspection requirements in your area.

Clearances

Masonry or Factory Built Fireplace

The minimum required clearances to surrounding combustible materials when installed into a masonry or factory built fireplace are listed below and in figure #1.

Minimum Clearances to Combustibles (Measured From Insert Body)

Adjacent Sidewall	8 in. (203 mm.)
Mantel.....	26 in. (660 mm.)
12" Mantel with Shield	20 in. (508 mm.)
(with part # SINB.MSMBKA)	
Top Facing	26 in. (660 mm.)
with Mantel Shield	20 in. (508mm)
(with part # SINB.MSMBKA)	
Side Facing (1.5 in. extension)	8 in. (203 mm.)

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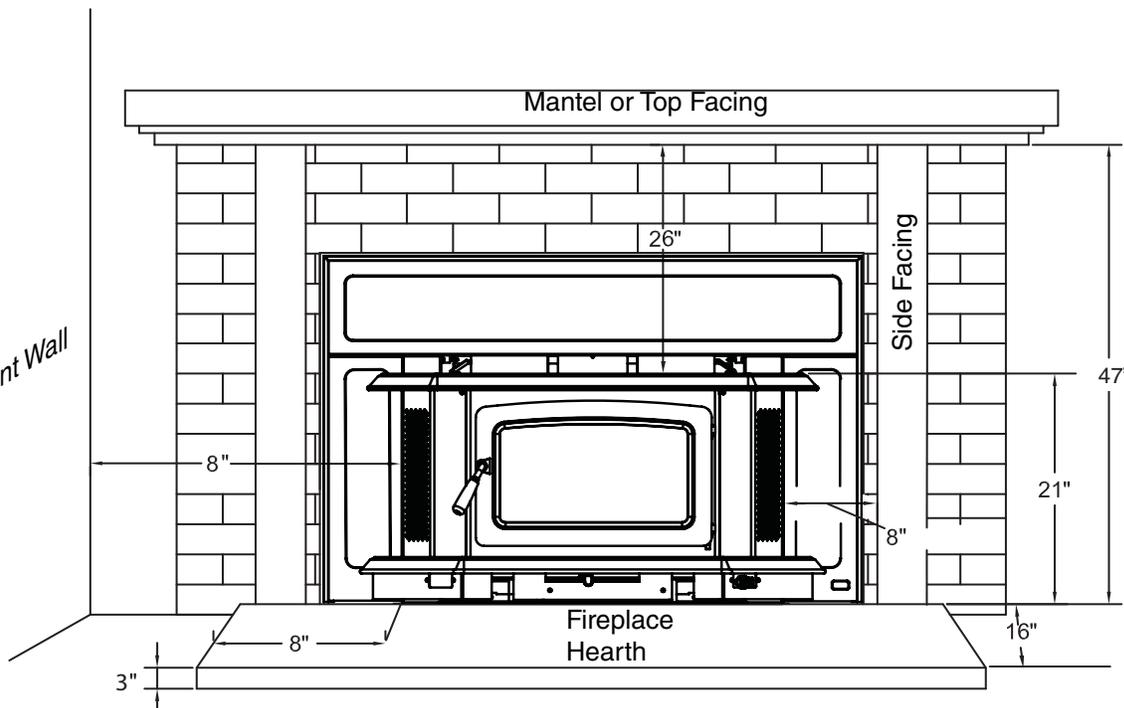
We recommend that our products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute (NFI) or in Canada by Wood Energy Technical Training (WETT)



Wood Energy
Technical Training
www.wettinc.ca

CAUTION: Unit hot while in operation. Parts of the appliance, especially the external surfaces, will be hot to touch when in operation. Keep children, clothing and furniture away. Contact may cause skin burns.

Fig. # 1



Maintenance Checks

Check the following parts for damage such as cracks, excessive corrosion, burned out sections and excessive warping: (See website for descriptions and more detail)

Weekly:

- Firebrick - Visual, for cracking.
- Door Gasket - sagging, placement, damage.

Monthly

- Brick rail tabs and brick rails.
- Air riser tube in the back of the firebox.
- Back side of airwash chamber.
- Baffle locking pin.
- Boost tube cover.

When Cleaning the Chimney System:

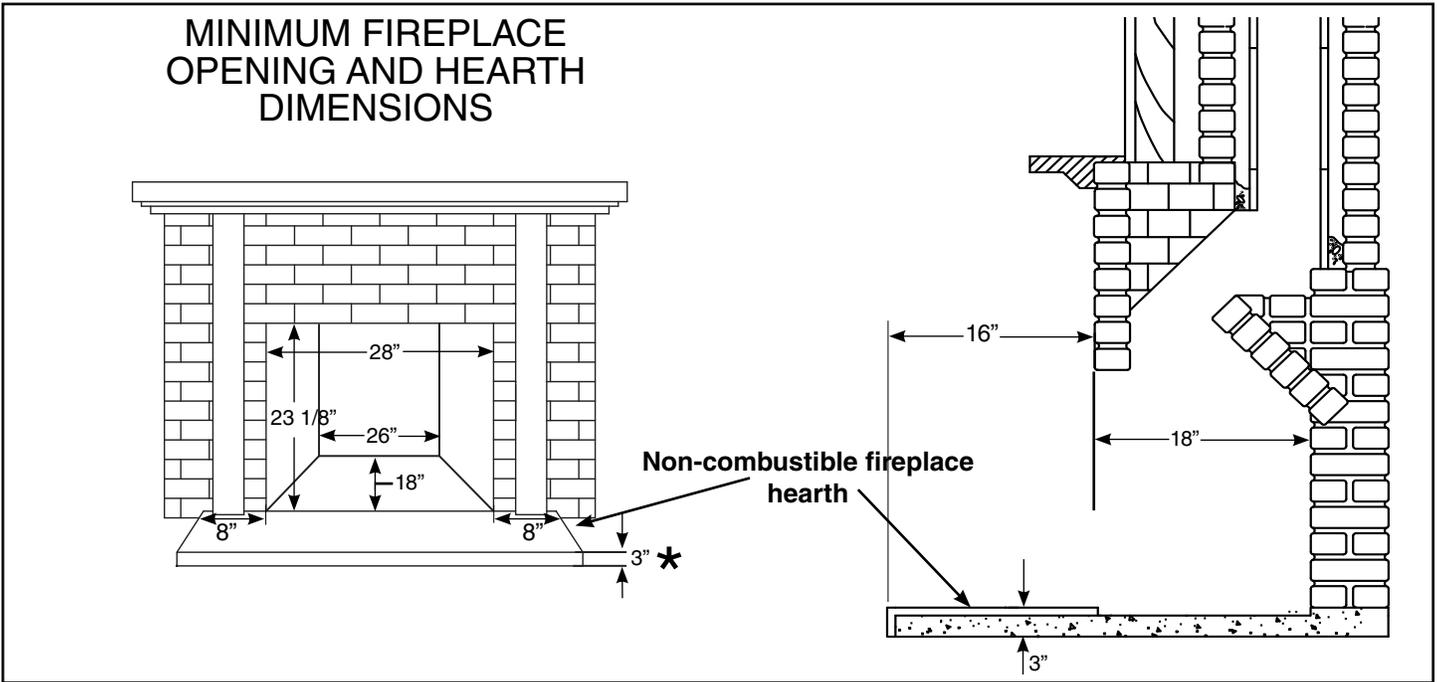
- Top baffle board/blanket.
 - Baffle.
 - Top heat shield and mounting bolt.
 - Baffle Gasket.
 - Brick Rails.
 - Manifold.
- Some warping of the baffle is normal(up to 1/4" or .65cm).
- Replace if the baffle has permanent warping greater than this or has cracking or breakage.
- Please contact your Dealer if you experience any of the damage listed above. Continuing to operate your stove with broken parts may accelerate damage to other parts and may void your warranty

Blowers:

- The blowers should be cleaned out a minimum every six months by using a vacuum on the blower intakes to remove any dust and debris. See "Fan Speed Controller Relocation" section on page 12, steps 1 & 2, for how to remove the panels and access the blowers.

*** Fireplace hearth requirements: (Measured without the insert)**

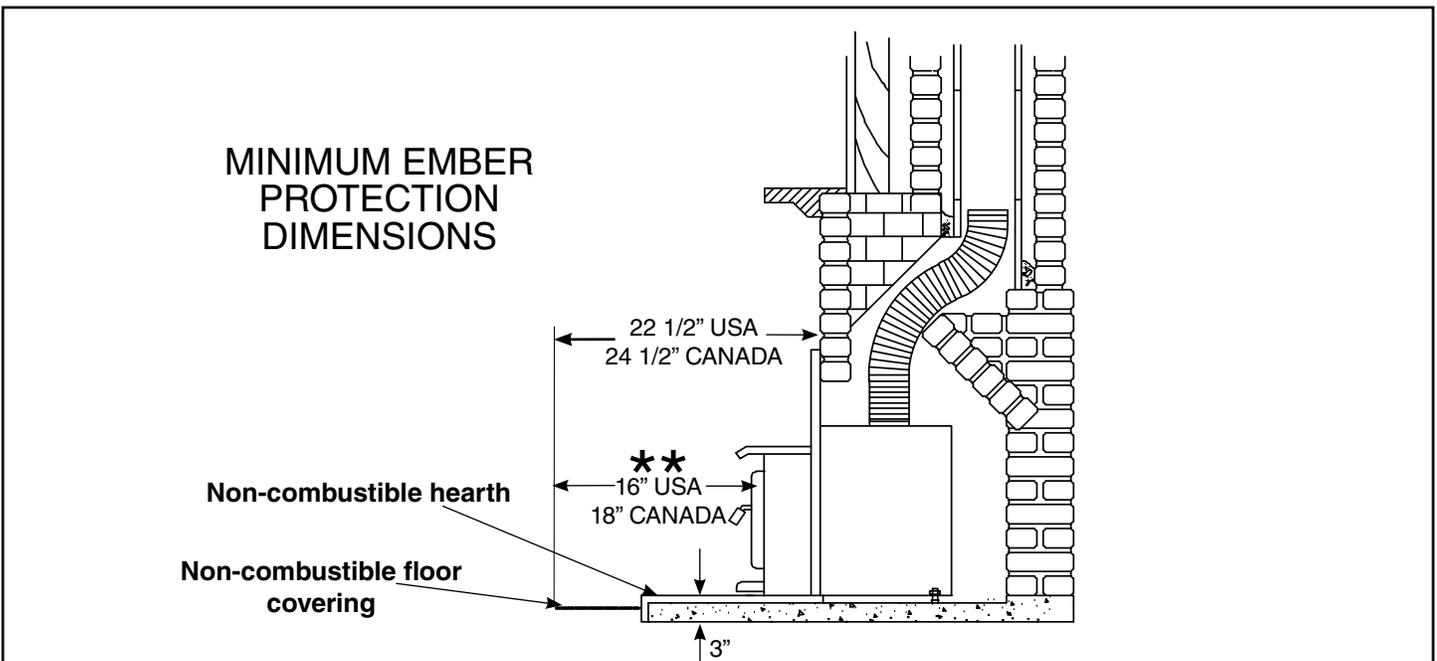
The non-combustible fireplace hearth must be raised 3" above an adjacent combustible floor and extend 16" in front and 8" beyond each side of the existing fireplace opening. A non-combustible hearth that extends a minimum 20-1/2" in front of the fireplace opening may be flush to an adjacent combustible floor.



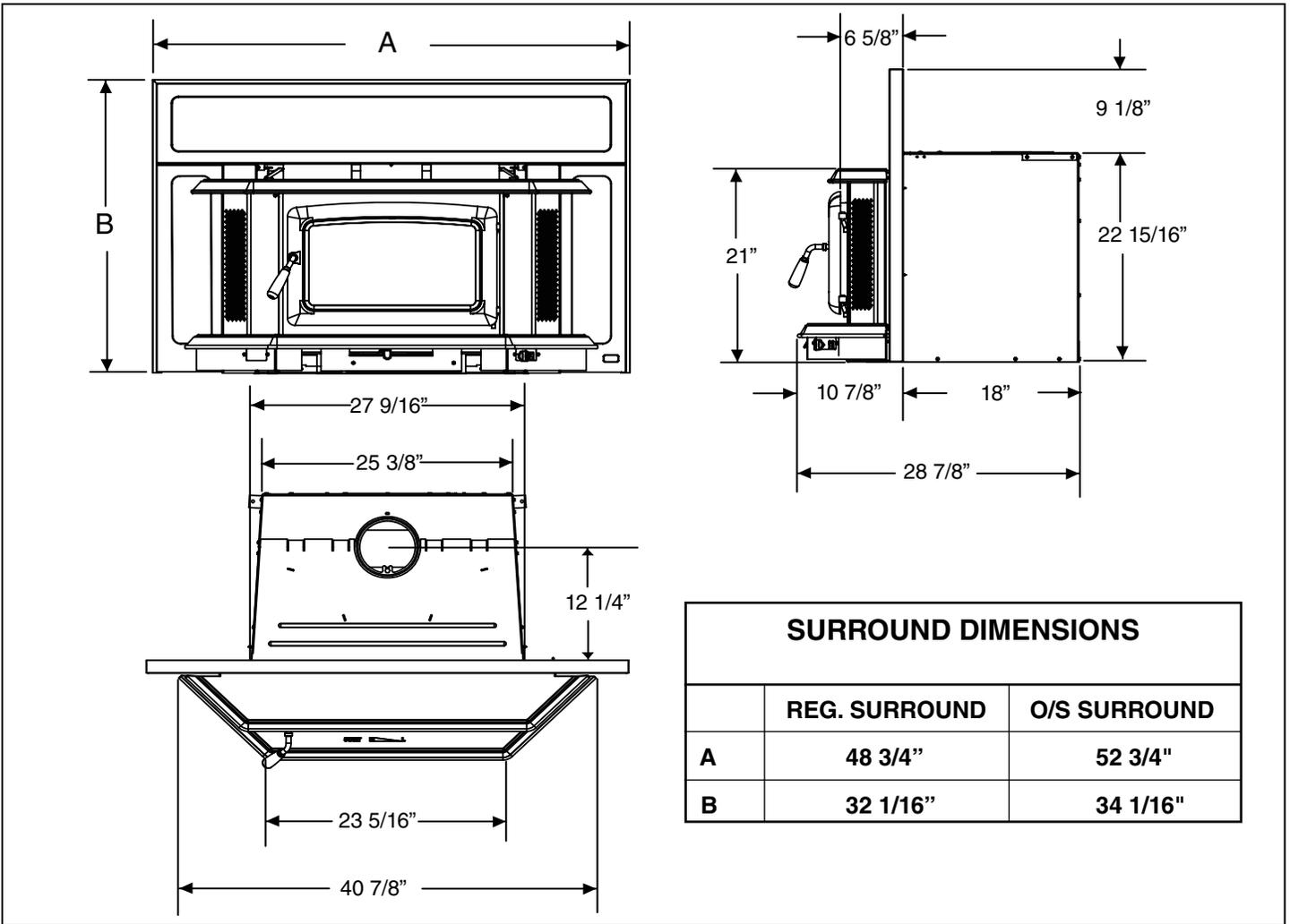
**** Ember protection:**

Combustible floor in front of the fireplace insert must be protected from hot embers by non-combustible material extending 16" (USA) and 18" (CANADA) to the firing side and 8" to other sides of the unit.

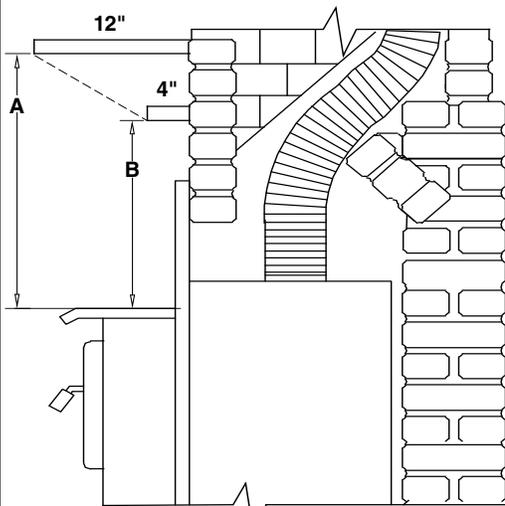
Consult CAN/CSA-B365 Installation Code for Solid-Fuel-Burning appliances and equipment in Canada, and N.F.P.A. 211 Standard for chimneys, fireplaces, vents and Solid-Fuel-Burning appliances in USA.



Dimensions



Mantel Clearances



MANTEL CLEARANCE CHART		
	WITHOUT SHIELD	WITH SHIELD
A	26"	20"
B	23 1/2"	18"

Installation

Your Insert is designed to be installed into a masonry or factory built zero-clearance fireplace. The masonry fireplace must be built according to the requirements of the Standard of Chimneys, Fireplaces, Vents and Solid Fuel Burning appliances, N.F.P.A. 211 (Latest Edition) or applicable National, Provincial, State or local codes. The installation shall conform to CAN/CSA-B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment. The factory built zero-clearance fireplace and its chimney must be listed per UL 127 or ULC S610 standards.

Warning: Under no circumstances is this heater to be installed in a makeshift or "temporary" manner.

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

Fireplace Specifications

Your fireplace is required to have the following minimum sizes:

WIDTH (at front)	28" (711 mm)
WIDTH (at rear)	26" (660 mm)
HEIGHT	23-1/8" (587 mm)
DEPTH	18" (457 mm)

Chimney height 15' (minimum).

A metal tag is provided and is to be fastened to the back wall of the fireplace, if the fireplace has been modified to accommodate the insert.

Into a Masonry Fireplace

Inspect your fireplace for cracks, loose mortar or other physical defects. If repairs are required, they should be completed before installing your insert.

The fireplace chimney must be suitable for wood burning use. Check for creosote build up or other obstructions, especially if it has not been in use for some time. Have chimney swept. The existing fireplace damper is to be locked open or removed completely.

WARNING: Do not remove bricks or mortar from your existing fireplace.

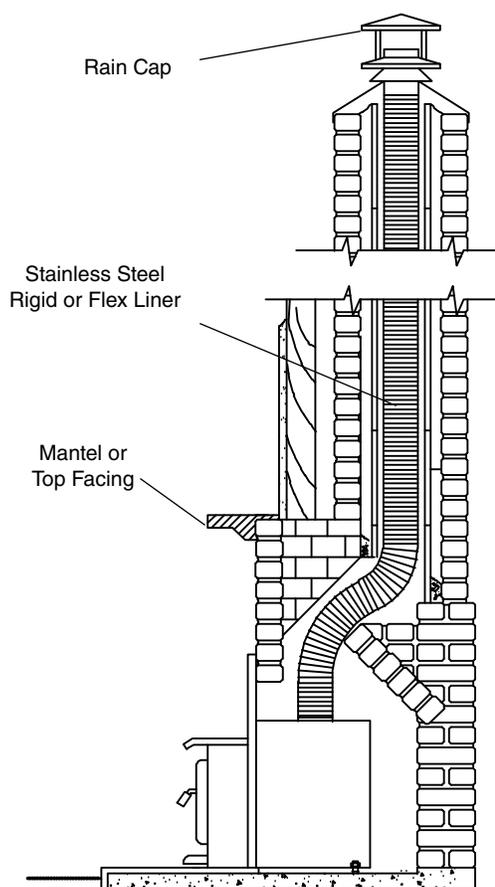
Exception: Masonry or steel, including the damper plate, may be removed from the smoke shelf and adjacent damper frame if necessary to accommodate a chimney liner, provided that their removal will not weaken the structure of the fireplace and chimney, and will not reduce protection for combustible materials to less than that required by the National Building Code.

The Insert must be installed in accordance with local and or national building codes. The two methods of flue connection that are acceptable in most areas are:

Full Flue Liner: (Fig.2, Required in Canada) where a stainless steel rigid or flexible liner extends from the Insert flue collar to the top of the chimney.

Fig. # 2

Full Flue Liner



Positive Flue Connection(In U.S.A. only): where a throat blocker plate and a short connector pipe is used.

Note: A clean-out door may be required under local codes, when a positive flue connection is used. Consult local codes.

Pacific Energy highly recommends the use of a full liner as the safest installation and providing optimum performance. When connected to a full liner, the Insert is able to draft correctly and will prevent problems such as difficult start-ups and smoking out the door.

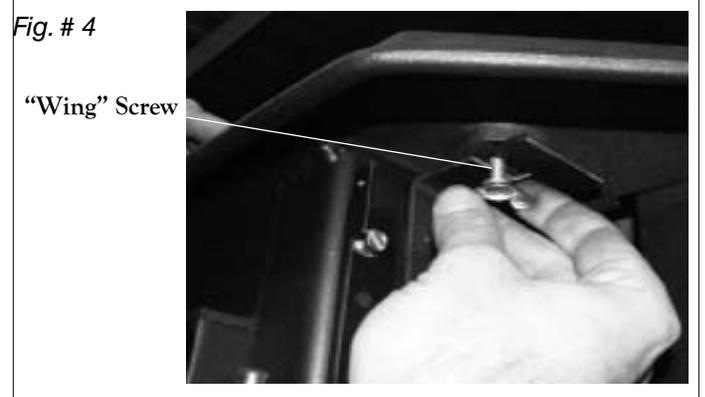
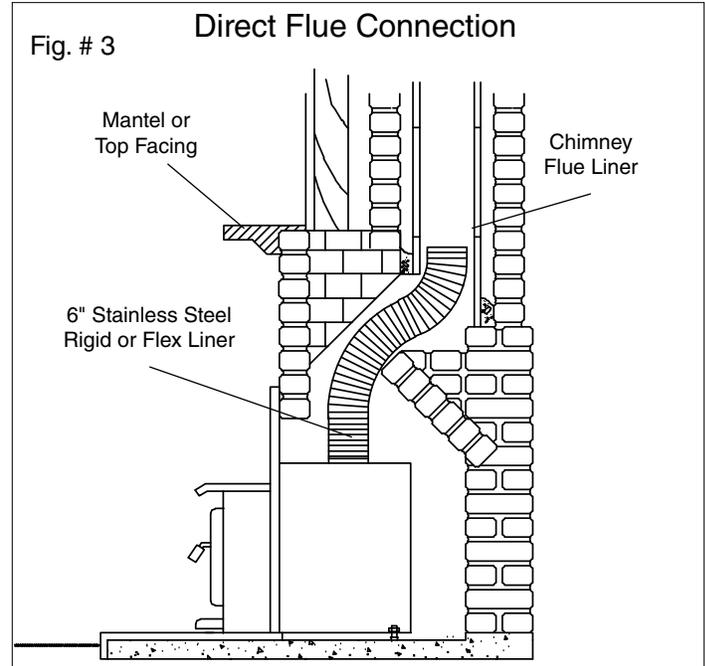
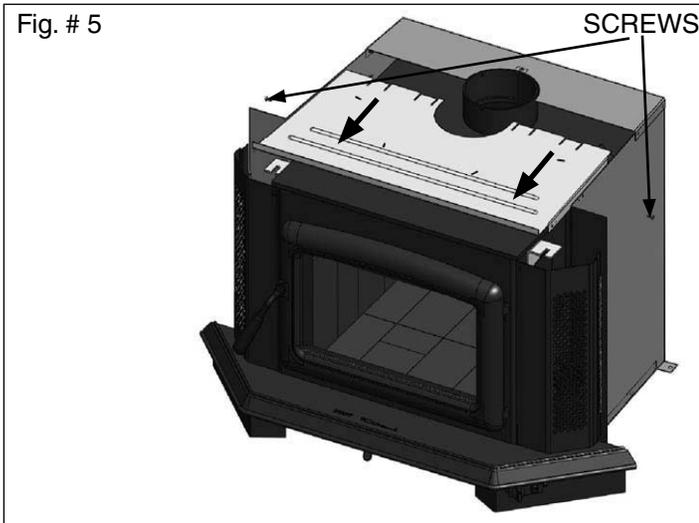
Full Flue Liner - (Required in Canada)

- 1) Measure the chimney height from the top of the existing flue to the floor of the hearth. This will allow extra length of liner for flashing and rain cap.
- 2) Feed the stainless steel liner from top of the chimney, through the damper area and into the fireplace cavity. Attach a stove connector to the bottom of the liner.
- 3) Remove bay top and both right & left blower covers (Fig #4 & 6).
- 4) Remove casing top by removing screws on each casing side and pulling top forward (Fig. #5).
- 5) Push insert into fireplace. Use the rear adjustment legs to level insert. (NOTE: Adjustment legs are located in bottom rear of insert)
- 6) Measure, trim and shape a top flashing to fit the existing chimney flue. Plan for a 1" to 1-1/2" overlap on each side. Place flashing over top of the liner and seat firmly against the tile.
- 7) Caulk around liner with high temp stove cement and insert into collar. Screw in fasteners to secure.
- 8) Attach a rain cap to the end of the liner. A storm collar may be used if desired.
- 9) Reattach casing top with screws previously removed.

Consult your local Dealer about relining your fireplace chimney.

Direct Flue Connection (USA only)

- 1) Measure from the first chimney flue liner tile to the top of the Insert. Allow extra length of liner to insert into flue tile.
 - 2) Feed the stainless steel liner through the damper area and into the first chimney flue tile. Seal around pipe.
- Note: A clean-out door may be required under local codes, when a direct flue connection is used. Consult local codes.
- 3) Remove bay top and both right & left blower covers (Fig #4 & 6).
 - 4) Remove casing top by removing screws on side and pulling top forward (Fig. #5).
 - 5) Push insert into fireplace. Use the rear adjustment legs to level insert.
 - 6) Attach connector pipe to stove collar.
 - 7) Reattach casing top and fasten.



Into a Factory Built Fireplace

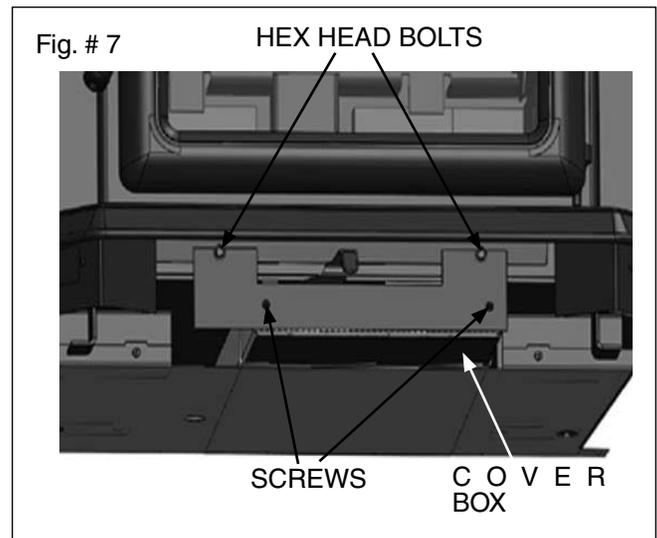
Your Insert may be installed into a factory built fireplace (size permitting) with the following requirements:

- 1) Inspect your fireplace for damage or other physical defects. The fireplace must be in good working condition. If in doubt about its condition, seek professional advice. Check for creosote build up or other obstructions inside the chimney, especially if it has not been in use for some time. Before installing, clean your chimney system thoroughly.
- 2) A full stainless steel rigid or flexible flue liner meeting type HT requirements (2100°F) per UL1777 (U.S.) or ULC S635 (Canada) must be used for both safety and performance. The liner must be securely attached to the Insert flue collar and the chimney top.
- 3) The surround must be sealed to the fireplace front or the damper area around the chimney liner must be sealed to prevent room air entering the chimney cavity of the fireplace.
- 4) The air flow within and around the fireplace must not be altered by the installation of the Insert (i.e. no blockage of louvers or cooling air inlet or outlet ports). This includes the circulating air chambers in a steel fireplace or metal heat circulator.
- 5) Alteration of the fireplace in any manner is not permitted with the following exceptions:
 - a: external trim pieces which do not affect the operation of the fireplace may be removed and stored on or within the fireplace for re-assembly if the Insert is removed.
 - b: the chimney damper may be removed to install the liner.

Combustion Air

Consult local building codes regarding combustion air supply. Intake or combustion air can be supplied to the Insert in one of two ways:

- 1) Outside air supply: Remove cover from ash clean out in existing fireplace. Place a rodent screen in place of the cover. Install the Insert as described in the "Installation" section, making sure not to cover the opening of the air inlet. When installation is complete, seal surround to fireplace and anywhere else air may enter. This will ensure combustion air is drawn from outside the house and into the 9" x 2" intake at the lower rear of the appliance.
- 2) Room air supply: Loosen the two hex head bolts slightly (DO NOT REMOVE) Remove the two screws in the cover plate and remove, slide the cover box out and discard. Replace cover plate and tighten hex head bolts. Fig. #7).



Surround Assembly and Installation

- 1) Lay part A, B and C face down on a flat, non-marring surface. Fasten together with 1/4" x 1/2" bolts and nuts provided through holes at points "D" (Fig. #8 and #10).
- 2) Lift the surround assembly to the upright position and make sure the front face is flat and even at the joints.
- 3) Assemble the three trim pieces using the enclosed hardware. Slide part F into the back corners of the trim and tighten screws. Ensure the mitred corners fit tightly and evenly (Fig. #9).
- 4) Slide the assembled trim over the surround from the top (Fig. #8).
- 5) Tighten the retaining screws at the bottom of each trim side (Fig. #9). If not already done, slide the entire insert out of the fireplace opening about 1" or more to aid in surround installation.

Fig. # 9

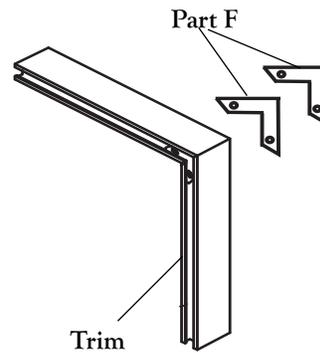


Fig. # 7

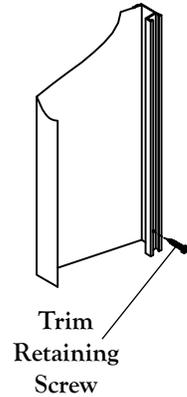


Fig. # 8

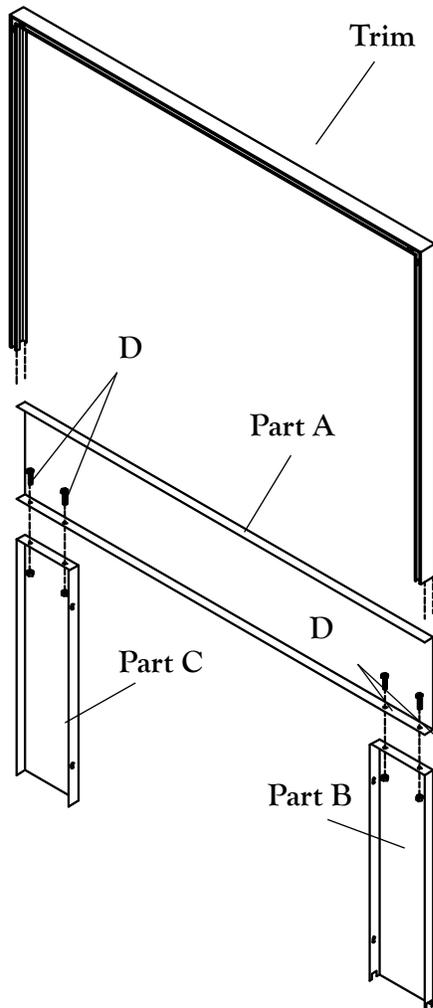
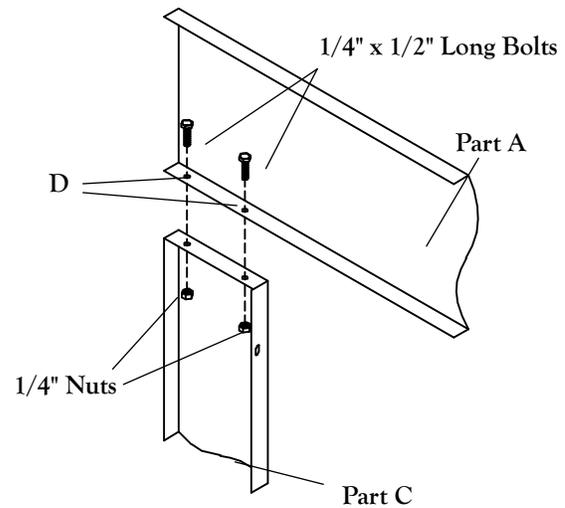


Fig. #10

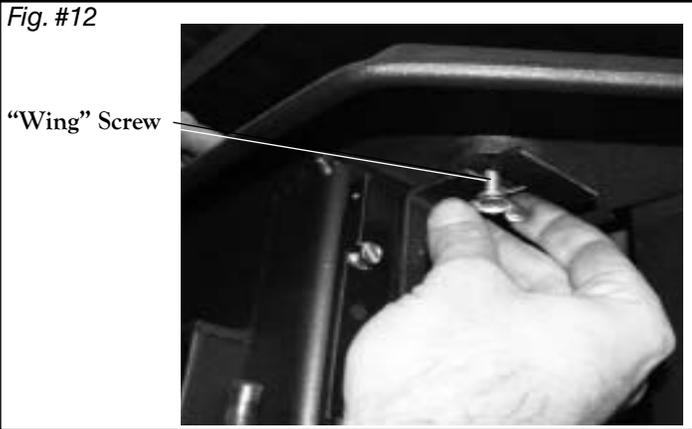


- 6) Remove the two screws located at the top of the left and right panels. Remove front panels and set aside to prevent damage (Fig. #11).

Fig. #11



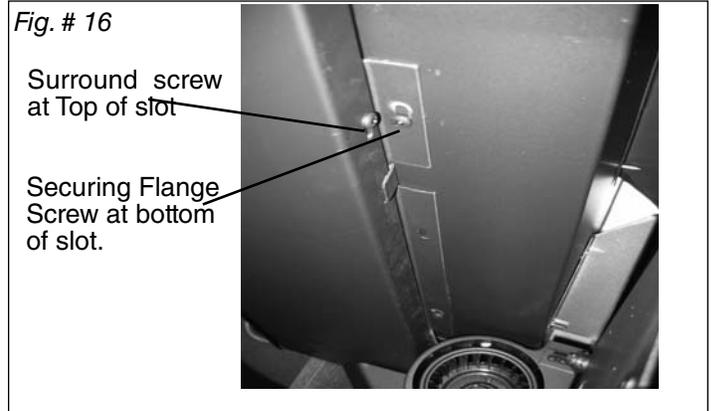
7) Remove wing screws on each side of the Bay top and set Bay top aside to prevent damage. (Fig. #12).



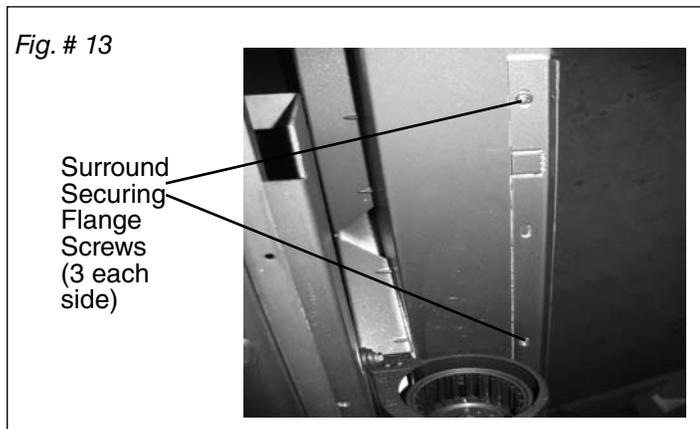
10) Slide the pre-assembled surround behind the ash lip. Ensure that the electric supply cord is located in the slots in the base of the surround.

11) Once the surround is fastened to the insert, in order to maximize heated air discharge efficiency, the surround can be pulled upward so that the fastening screws are at the lowest end of the surround securing flange slots. (Fig.16)

12) Push the entire appliance back until the surround assembly is in contact with the fireplace structure.



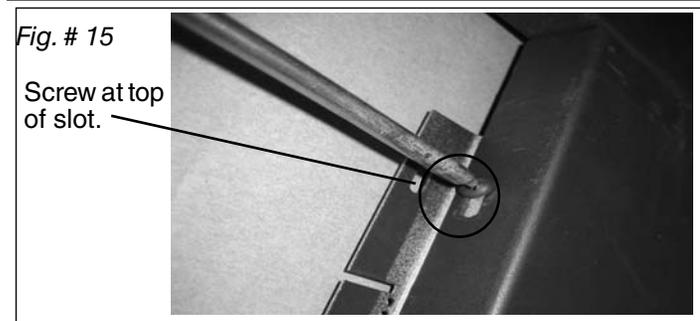
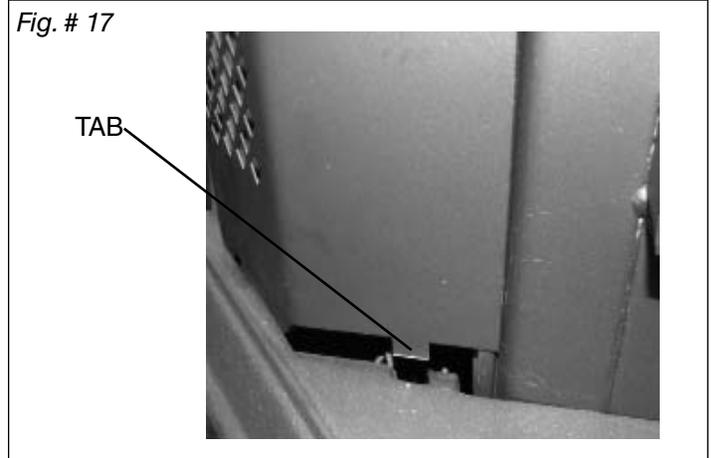
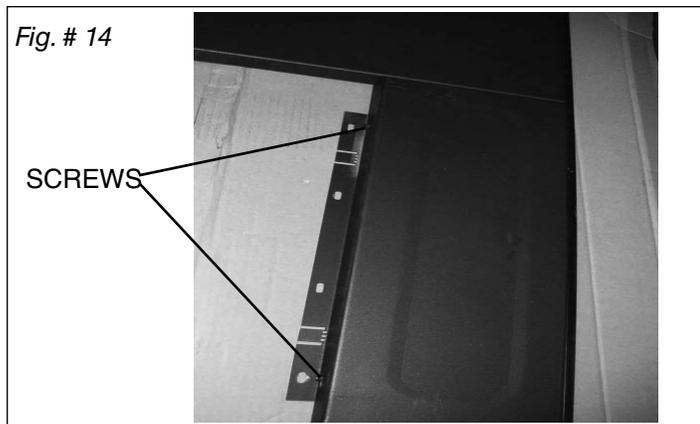
8) Remove the surround securing flanges from the fireplace (Fig.13) and relocate to the pre-assembled surround.



13) Replace the front panels ensuring that the tabs (Fig.17) on the lower edge of the panels are located into the slots in the ashlip, secure with screws (Fig.11).

14) Position the decorative bay top onto the firebox top. Align and refasten the wing screws.

9) Slide the securing flange up so that the fastening screws are at the top of the slots in the surround. (Fig.14 & 15)



Fan Speed Controller Relocation

The fan speed controller is factory installed under the ash lip on the right hand side. If required, it can be relocated to the left side by following the instructions below. To make this as easy as possible, it is suggested that this be done prior to fitting the surround and installation into the fireplace:

- 1) Remove the screw located at the top of the left and right panels.

Fig. # 18



- 2) Lift up on each panel and remove. Set aside to prevent damage.

Fig. # 19



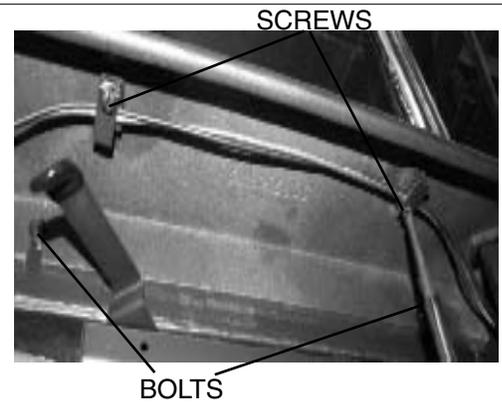
- 3) Disconnect the wires from the fans (LHS & RHS) and thermal snap switch. Take note of where the wires are routed and secured. They must be positioned correctly to avoid damage.

Fig. # 20



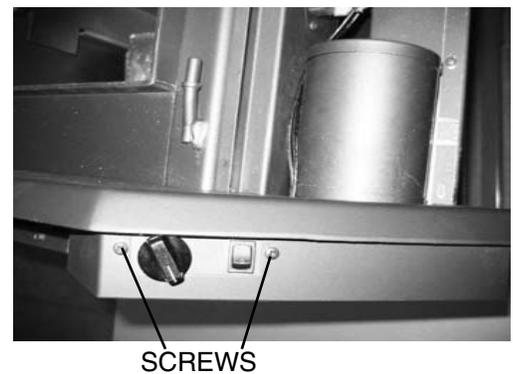
- 4) Loosen the two bolts that secure the ash lip to the firebox, carefully lift up the ash lip and remove from the firebox and unscrew the wire support tabs.

Fig. # 21



- 5) Remove the two screws securing the speed controls assembly to the ash lip. The cover plate on the opposite side can also be removed at this time.

Fig. # 22



- 6) Remove the control assembly from the right hand side of the ashlip. Flip it over and reattach on the left hand side of the ashlip. Use the upper screw holes for best alignment.

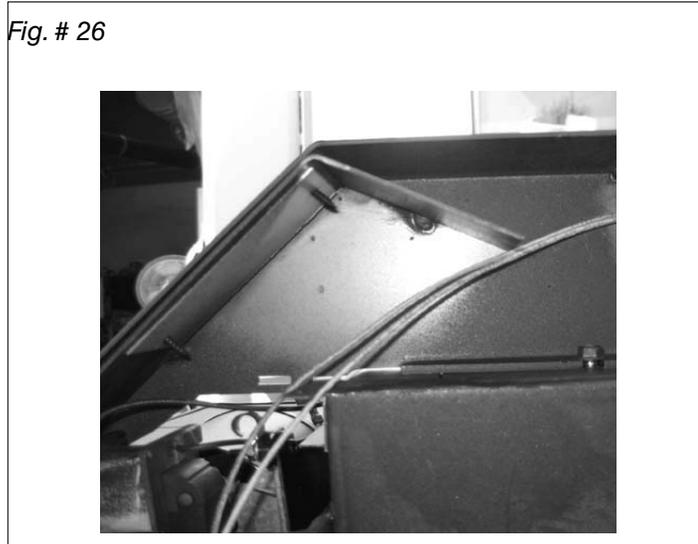
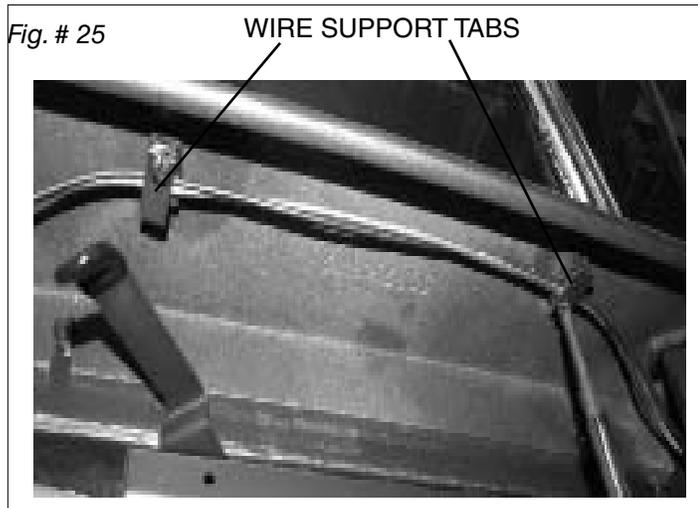
Fig. # 23



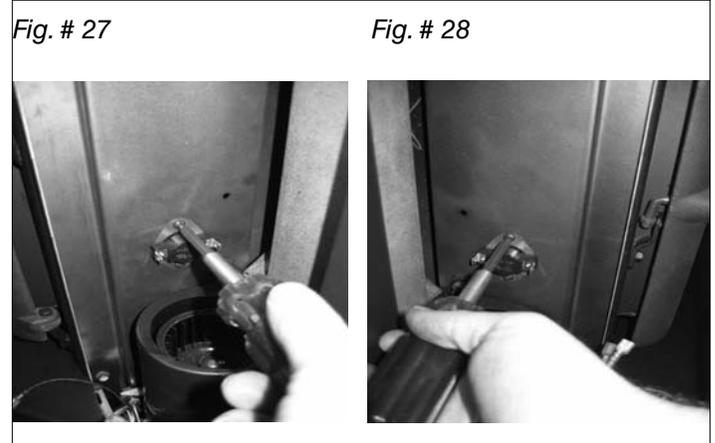
Fig. # 24



7) Route cable from speed control to fan and reattach wire support tabs on the underside of the ash lip. Note wire positions. (Fig.25 & Fig.26)



8) Remove Thermal switch from right hand fan mounting bracket and relocate to left hand fan mounting bracket. Fig #27&28



9) Reconnect the wires to the fans (Fig.29) and thermal snap switch (Fig.30), refit ash lip, sides and top. Ensure that the power cable is correctly routed through the surround and it is not touching the firebox side. Wire placement is important to prevent damage to wires.



Operation

Wood Selection

This heater is designed to burn natural wood only. Higher efficiency and lower emissions generally result when burning air-dried seasoned hardwoods, as compared to softwoods or too green or freshly cut hardwoods.

Wood should be properly air dried (seasoned) for six months or more. Wet or undried wood will cause the fire to smoulder and produce large amounts of creosote. Wet wood also produces very little heat and tends to go out often.

DO NOT BURN:

- | | |
|--------------------|--------------------|
| -*Salt water wood | -Coal/charcoal |
| -Treated wood | -*Garbage/Plastics |
| -Wet or green wood | -Solvents |

* These materials contain chlorides which will rapidly destroy metal surfaces and void warranty.

Do not burn anything but wood. Other fuel, e.g. charcoal, can produce large amounts of carbon monoxide, a tasteless, odourless gas that can kill. Under no circumstances should you attempt to barbecue in this heater.

How to Test Your Wood

Add a large piece of wood to the stove when it has a good, large bed of coals. It is dry if it is burning on more than one side within one minute. It is damp if it turns black and lights within three minutes. If it sizzles, hisses and blackens without igniting in five minutes it is soaked and should not be burnt.

WARNING: Do not use grates or andirons to elevate the fuel. Burn directly on the firebricks. Replace broken or missing bricks. Failure to do so may create a hazardous condition.

Your Pacific Energy heater is designed for maximum overall efficiency at a moderate firing rate. Overfiring is hazardous and a waste of fuel. Too slow a burn contributes to creosote buildup and lowers combustion efficiency.

Lighting the Fire

WARNING: Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while in use.

- 1) Adjust air control to "H" (high) position (pushed to the far left) and open door.
- 2) Place crumpled newspaper in the centre of the heater and criss-cross with several pieces of dry kindling. Add a few small pieces of dry wood on top.
- 3) Ignite the paper and close the door.
- 4) After the fire has established itself, open the door and add a few small logs. Close door.
- 5) Begin normal operation after a good coal base exists and wood has charred.

Normal Operation

- 1) Set air control to desired setting. If smoke pours down across the glass (waterfall effect), this indicates you have shut the control down too soon or you are using too low a setting. As every home's heating needs vary (i.e. insula-

tion, windows, climate, etc.), the proper setting can only be found by trial and error and should be noted for future burns.

- 2) To refuel, adjust air control to "H" (high) position (pushed to the far left) and give the fire time to brighten. **Open door slowly**, this will prevent backpuffing.
- 3) Use wood of different shape, diameter and length (up to 20"). Load your wood endwise and try to place the logs so that air can flow between them. Always use dry wood.
- 4) Do not load fuel to a height or in such a manner that would be hazardous when opening the door.
- 5) For extended or overnight burns, unsplit logs are preferred. Remember to char the wood completely on "H" (high) setting before adjusting air control for overnight burn.

WARNING: Always keep the loading door closed when burning. If the door is left partly open, gas and flames may be drawn out of the fireplace stove opening creating risks from fire and/or smoke. This heater is not designed for open door burning, unless a manufacturer supplied screen is used.

DO NOT OVERFIRE THIS HEATER: Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater and chimney.

WARNING: No alteration or modification of the combustion air control assembly is permitted. Any tampering will void warranty and could be very hazardous.

Do not store/place wood or other combustibles within the required clearances surrounding the unit.

Restarting After Extended or Overnight Burns

- 1) Open door and rake hot embers towards the front of the heater. Add a couple of dry, split logs on top of embers, close door.
- 2) Adjust air control to "H" (high) position (pushed to the far left) and in just a few minutes, logs should begin burning.
- 3) After wood has charred, reset air control to desired setting.
- 4) When burning at a slow rate for extended periods, occasionally maintain a strong fire under supervision for a couple of hours to relieve firebox and chimney deposits as well as any of the deposits on the glass.

WARNING: This method is not a substitute for regular chimney inspections and cleaning.

- 5) To achieve maximum firing rate, set control to "H" (high) position (pushed to the far left). Do not use this setting other than for starting or preheating fresh fuel loads.

More Wood, More Heat

Seasoned wood has approximately 7500 BTU's per pound. If you put 10 pounds of wood in your stove for an eight hour burn the wood will be producing 9375 BTU's per hour. (7500 BTU x 10 lbs / 8 hrs. = 9375 BTU's per hr.). If you put 20 lbs of wood in your stove for an eight hour burn you will get 18,750 BTU's per hr. (7500 BTU x 20 lbs / 8 hrs. = 18,750 BTU's per hr.). This is only an example and is based on 100% efficiency. In reality, your stove should perform above the 80% range.

Experience will give you the right settings for proper combustion and efficient burning. Remember, the air inlet setting is affected by variables such as type of wood, outside temperature, chimney size and weather conditions. With practice, you will become proficient in operating your heater and will obtain the performance for which it was designed.

Proper Draft

- 1) Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors.
- 2) Too much draft may cause excessive temperatures in the appliance. An uncontrollable burn or a glowing red stove part or chimney indicates excessive draft.
- 3) Inadequate draft may cause backpuffing into the room and plugging of the chimney. Smoke leaking into the room through appliance and chimney connector joints indicates inadequate draft.

Ash Removal

Whenever ashes get 3 to 4 inches deep in your firebox, and when fire has burned down and cooled, remove excess ashes. Leave an ash bed approximately 1 inch deep on the firebox bottom to help maintain a hot charcoal bed.

Disposal of Ashes

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. 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 thoroughly cooled. Other waste should not be placed in this container!

Blower

The Insert comes equipped with twin variable speed circulating air blowers. The blower system is thermostatically controlled for automatic operation, as well as manually with a convenient bypass switch.

Blower Operation

Automatic: To operate the blowers automatically, push the rocker switch to the "OFF" position and set the fan speed control to a desired setting.

This will allow the blowers to turn on automatically once the Insert has come up to operating temperature. It will also shut the blowerS off after the fire has gone out and the appliance has cooled to below a useful heat output range.

Manual: To manually operate the blowers, push the rocker switch to the "ON" position and set the fan speed control to a desired setting. This will bypass the temperature switch and allow full control of the blowers.

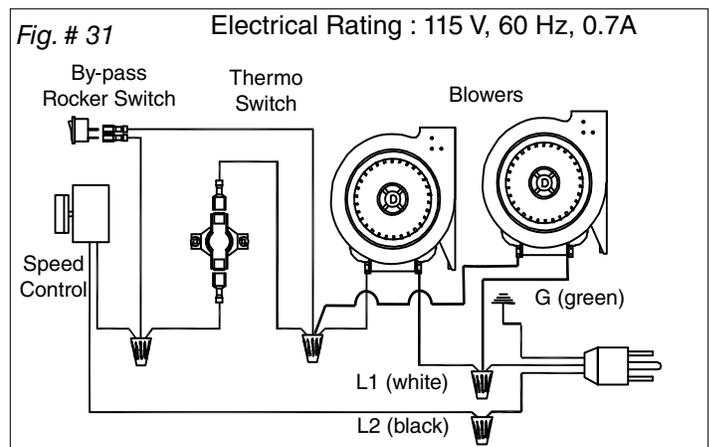
Suggested settings:

- Combustion air control setting of "L" (low) position (pushed to the far right), operate blower speed control on "Low".
- Combustion air control set at anything above "L" (low), operate blower speed control at desired setting.

Electrical Supply

Circulating air blower electrical rating; 115V, 60 Hz, 0.7 A. For your protection against shock hazard, use only a properly grounded outlet that will accept a three-pronged plug. Do not cut or remove the grounding prong. Do not route power cord under unit. Power cord must be routed to avoid contact with any hot or sharp surfaces.

Consult local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code and in the USA with the National Electrical Code, ANSI/NFPA 70 (latest edition).



Creosote

Formation and Need for Removal

When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

1. Highest smoke densities occur when a large amount of wood is added to a bed of hot coals and the air inlet is closed. The heated wood generates smoke, but without ample air, the smoke cannot burn. Smoke-free, clean burning requires small fuel loads, two or three logs at a time or 1/4 to 1/2 of a fuel load and leaving the air inlet relatively wide open, especially during the first 10 to 30 minutes after each loading, when most of the smoke generating reactions are occurring. After 30 minutes or so, the air inlet can be turned down substantially without excessive smoke generation. Wood coals create very little creosote-producing smoke.
2. The cooler the surface over which wood smoke is passing, the more creosote will be condensed. Wet or green wood contributes significantly to creosote formation as the excess moisture that is boiled off cools the fire, making it difficult for the tars and gasses to ignite, thus creating dense smoke and poor combustion. This moisture-laden smoke cools the chimney, compounding the problem by offering the smoke the ideal place to condense.

In summary, a certain amount of creosote is inevitable and must be lived with. Regular inspection and cleaning is the solution. The use of dry, seasoned wood and ample combustion air will help to minimize the buildup.

Chimney Fires

The result of excessive creosote buildup is a chimney fire. Chimney fires are dangerous. Chimney inside temperatures can exceed 2000 degrees F. This causes much higher than normal temperatures in the chimney and on its exterior surfaces thus ignition of nearby or touching combustible material is more likely during a chimney fire. Proper clearances are critical during such a fire.

Chimney fires are easy to detect; they usually involve one or more of the following:

- Flames and sparks shooting out of the top of the chimney
- A roaring sound
- Vibration of the chimney

In Case of a Chimney Fire

1. Prepare to evacuate to ensure everyone's safety. Have a well understood plan of action for evacuation. Have a place outside where everyone is to meet.
2. Close air inlets on stove.
3. Call local fire department. Have a fire extinguisher handy. Contact your local fire authority for further information on how to handle a chimney fire. It is most important that you have a clearly understood plan on how to handle a chimney fire.
4. After the chimney fire is out, the chimney must be cleaned and checked for stress and cracking before starting another fire. Also check combustibles around chimney and the roof.
 - The services of a competent or certified installer, (certified by the Wood Energy Technical Training program (WETT) - in Canada, Hearth Education Foundation (HEARTH) - in U.S.A.,) are strongly recommended.

Avoiding a Chimney Fire

There are two ways to avoid chimney fires:

1. Do not let creosote build up to a point where a big chimney fire is possible.
2. Do not have fires in the heater that may ignite chimney fires. These are hot fires, such as when burning household trash, cardboard, Christmas tree limbs, or even ordinary fuel wood; (eg. with a full load on a hot bed of coals and with the air inlet wide open).

Maintenance

1. Burn wood only, dry and well seasoned. The denser or heavier the wood when dry, the greater its heat value. This is why hardwoods are generally preferred. Green or wet wood should not be used, as it will reduce heat output, as well as contributing significantly to creosote buildup.

WARNING: Never use chemicals or any other volatile liquid to start a fire. Do not burn garbage, or flammable fluids such as gasoline, naphtha, or engine oil. We strongly recommend that smoke detectors be installed.

2. Remove ashes frequently. Embers can roll out the door and create a fire hazard. Maintain a 1" minimum ash base.
3. If glass becomes darkened through slow burning or poor wood, it can readily be cleaned with any fireplace glass cleaner when stove is cold. Never scrape with an object that might scratch the glass. The type and amount of deposit on the glass is a good indication of flue pipe and chimney buildup. A light brown dusty deposit that is easily wiped off usually indicates good combustion and dry, well-seasoned wood and therefore relatively clean pipes and chimney. On the other hand, a black, greasy deposit that is difficult to remove is a result of wet and green wood and too slow a burning rate. This heavy deposit is building up at least as quickly in the chimney.

WARNING: Only use materials and components supplied or specified by the manufacturer when doing maintenance or replacements.

4. DOOR GASKET - The gasket used by Pacific Energy requires only light pressure to seal. This will prolong seal life. It is important that the door seal be maintained in good condition. Periodically inspect seals and replace if necessary. Follow instructions included in the DR31.WDGKIT kit obtainable from your nearest Pacific Energy Dealer.
5. DOOR GLASS - Do not slam loading door or otherwise impact glass. When closing door, make sure that no logs protrude to impact the glass. If the glass gets cracked or broken, it must be replaced before using the stove. Replacement glass can be obtained from your Dealer. The size required is 9-1/2 x 17-1/2 (Summit Insert) x 5 mm Robax. Ceramic glass must be used. Do not substitute with any other type.

To remove broken glass, undo the four retaining screws and remove the frame noting position for re-assembly. Remove all particles of glass. Be careful as they are very sharp. Install new glass complete with gasket. Replace frame and screws.

WARNING: Do not overtighten, tighten screws very carefully.

- Do not clean glass when hot
- Do not use abrasive cleaners on glass

6. The area where boost combustion air enters the firebox must be kept clear of excessive ash buildup which will block air flow. This area is at the front of the firebox.

7. Do not store wood within heater installation clearances, or within the space required for fuel loading and ash removal. Keep the area around the heater clean and free of all loose combustibles, furniture, newspapers, etc.
8. If gold door requires cleaning, use mild soap and water only. Use of abrasive cleaners will void warranty.
9. Establish a routine for the fuel, wood burning and firing technique. Check daily for creosote buildup until experience shows how often you need to be cleaning to be safe.
10. Be aware that the hotter the fire, the less creosote is deposited. Weekly cleaning may be necessary in mild weather, even though monthly cleaning is usually enough in the coldest months when burning rates are higher.
11. Instruct all members of your family on the safe operation of the heater. Ensure they have enough knowledge of the entire system if they are expected to operate it. Stress the section on chimney fires and the importance of following the steps outlined in "In Case of Chimney Fire."

Baffle Removal

The Insert and pipe should be removed from the fireplace to clean and inspect. Only if this is not possible should you remove baffle assembly.

DO NOT OPERATE WITH BAFFLE ASSEMBLY OR INSULATION REMOVED.

Baffle Assembly Removal

Remove retaining pin at the back top of the firebox, just under the baffle. Lift baffle up and pull forward to disconnect from the supply tube. Tilt baffle sideways to drop down and remove from firebox.

Inspect gasket between baffle and supply tube. If necessary, replace with gasket # 3139.5 available from your nearest Pacific Energy Dealer.

Re-install baffle assembly and insulation by reversing order.

It is recommended to inspect the liner and connector monthly and to have the liner cleaned annually or more frequently if required.

Appendix A

Understanding & Operating Your Pacific Energy Stove

The Pacific Energy line of woodstoves is a culmination of years of research and development. Designed to be efficient, clean-burning and user-friendly, this heater will give you years of warm service. However, a knowledgeable operator is still the most important factor for maximum performance and part of this is understanding the basic functions of this design.

Traditional wood stoves had a basic combustion system which allowed a considerable amount of heat energy to escape up the chimney as unburned gases and particulates (smoke). Pacific Energy has designed a system that solves the problem by burning the smoke and releasing the additional heat to the room.

This system has two critical design features:

1. Above fire secondary air injection:

The hollow "air baffle" injects super-heated secondary air just above the load. With the stove at the proper operating temperature, this will create a secondary flame that will be evident for approximately 1/3 of the total burn time.

2. High mass and thermal insulation:

The high mass (weight) acts as a heat storage and the thermal insulation keeps the combustion zone hot. Active flaming takes place during the first part of the burn. During this stage, heat is stored in the mass of the unit and is later released slowly and evenly. As wood chars, active flaming will diminish. This clean charcoal burning stage will last for a considerable length of time and refueling

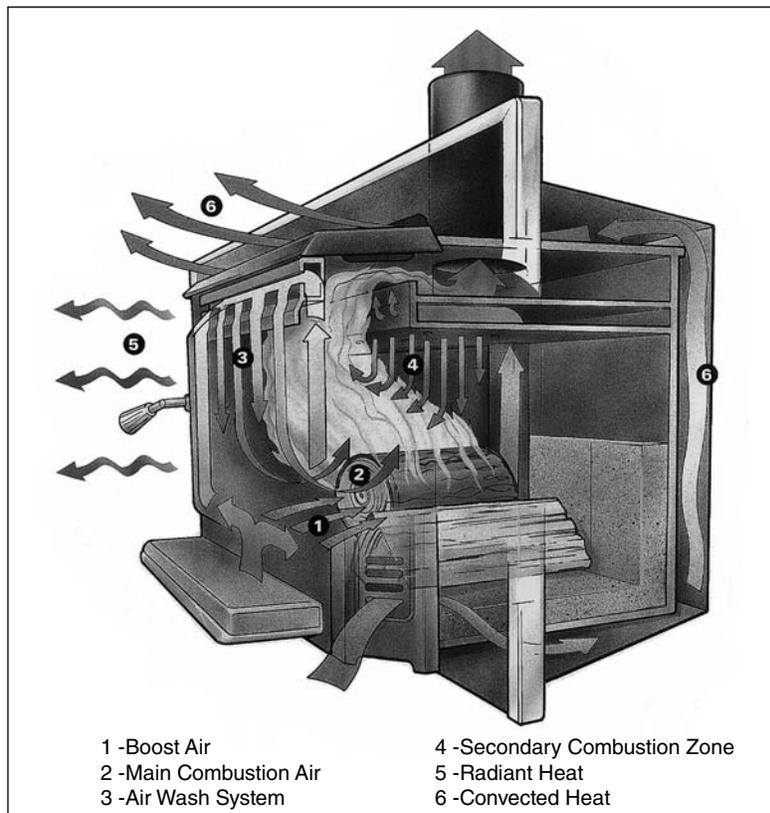
should be avoided until the charcoal base has become quite small.

OPERATING TIPS

1. Always use dry, seasoned firewood, up to 18" long. Load wood endwise, a mixture of large and small pieces, on top of a good ash base (1" minimum).
2. Operate on a medium to high setting, for up to 1 hour from cold start. After the initial warm up period, refuel and leave the air control on a medium setting for 5 to 10 minutes more and then set the air control to the desired position.

3. If a slow burn is desired, set the air control to low. Active secondary burning should be present above the wood load. If it is not present or goes out shortly after, proper operating temperature has not been reached and the stove needs additional warm up time.

For additional operating, safety and maintenance information, refer to the installation manual.



Troubleshooting

Problem	Cause	Cure
Glass is Dirty	1. Wood is wet	- Use dry wood
	2. Turning down air control or damper too soon	- Do not turn down until a) there is a good bed of coals b) the wood is charred
	3. Draft too low	- Improper chimney height and / or diameter - Chimney plugged or restricted, inspect and clean - Provide outside air for combustion
	4. Door gasket leakage	- Replace gasket - Check latch
Excessive Creosote Buildup	- See 1,2,3, above.	
Low Heat Output	1. Wood is wet	- Use dry wood
	2. Fire too small	- Build a larger fire
	3. Draft too low	- Chimney plugged or restricted, inspect and clean
Won't Burn Overnight	1. Air control is set too high	- Set control lower
	2. Not enough wood	- Unsplit wood is preferred for overnight burns
	3. Draft too high	- Excessive chimney height and/or diameter
Stove Won't Burn	1. Combustion air supply blocked	- Check outside air supply for obstruction - Check that room air cover is removed
	2. Draft too low	- Chimney plugged or restricted, inspect and clean - Chimney oversized or otherwise unsuitable, consult Dealer



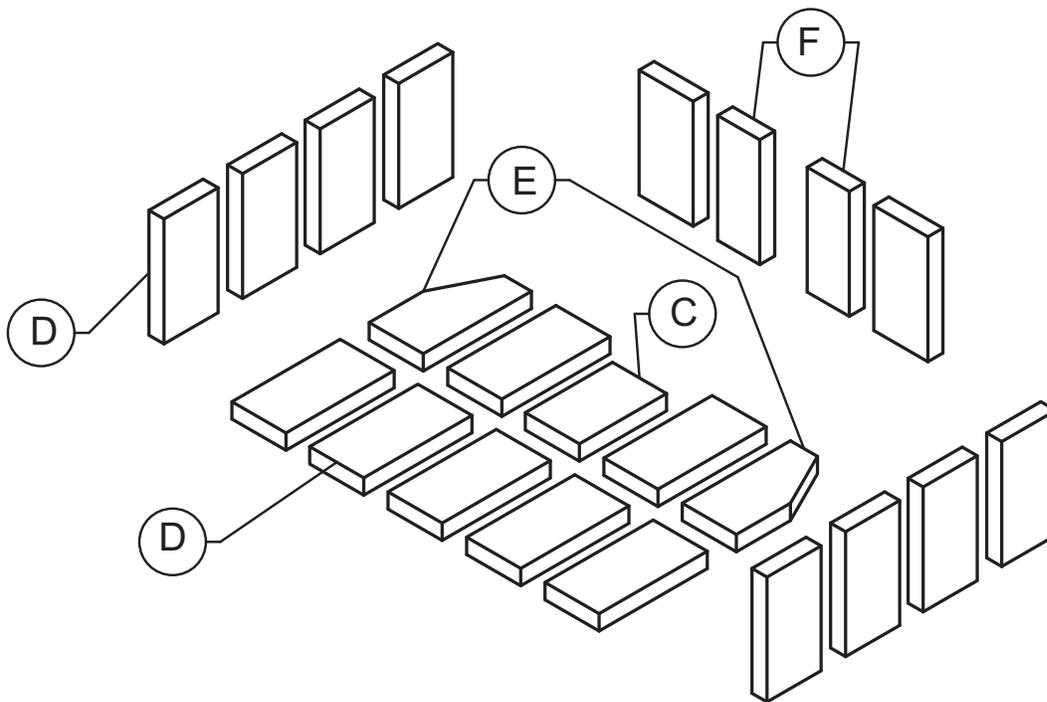
Firebrick Installation

Summit Insert Wood Stove

This package contains 17 full-size firebricks, as well as 7 various cut-size bricks.

With the woodstove in the upright position, install firebricks as follows:

- 1) Place the firebricks on the bottom of the unit first. Use 7 full-size (D) and 3 cut bricks (C & 2E).
- 2) Next install the side firebricks, 4 full-size bricks on each side of the firebox as shown.
- 3) Finally install 2 full-size and 2 cut firebricks against the rear wall as shown.



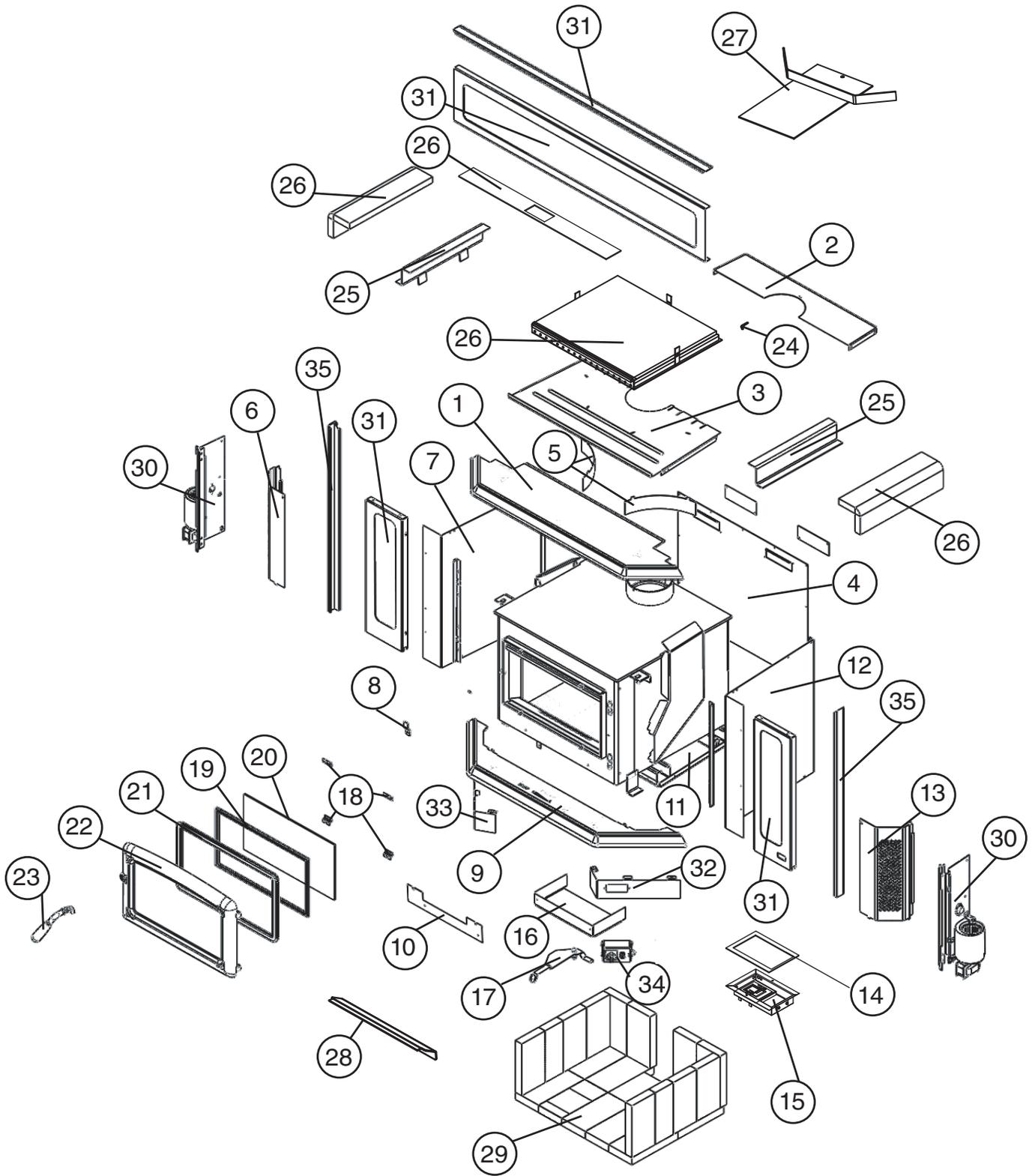
ITEM	SIZE		PART NUMBER
A	1 1/2" X 4 1/2" X 1 1/4"	(39 mm x 115 mm x 32 mm)	248.001
B	4" X 4 1/2" X 1 1/4"	(102 mm x 115 mm x 32 mm)	246.001
C	7 1/4" X 4 1/2" X 1 1/4"	(184 mm x 115 mm x 32 mm)	245.001
D	9" X 4 1/2" X 1 1/4"	(230 mm x 115 mm x 32 mm)	5096.99
E	9" X 4 1/2" (cut) X 1 1/4"	(230 mm x 115 mm (cut) x 32 mm)	3245.011
F	9" X 3 1/2" X 1 1/4"	(102 mm x 115 mm x 32 mm)	3245.501

Replacement Parts

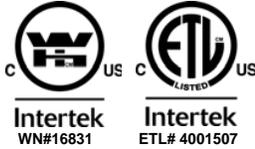
(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEM	DESCRIPTION	PART NO.	ITEM	DESCRIPTION	PART NO.
1.....	Bay Top (c/w Washers and Nuts).....	SINS.50374524	23....	Door Handle Assembly (c/w Wood Handle and Nut)	WODC.4147C
2.....	Casing Top, Back	3502	24....	Baffle Pin	SSER.125001
3.....	Casing Top, Front.....	3502.51	25....	Brick Rail Set(2 pcs. required)	SUMM.RAILSET
4.....	Casing Back.....	3504.001	26....	Baffle Kit (includes side insulation, 2pcs)	SUMB.BAFKIT
5.....	Air Deflector	3505	27....	Flame Shield (c/w Bolt, Washer and Nut).....	SINB.3525
6.....	Front Panel, Left	SINB.3544	28....	Boost Manifold.....	3105.111
7.....	Casing Side, Left	SINS.3509.51	29....	Firebrick - 9" x 4 1/2" x 1 1/4" (19 pcs. required).....	5096.99
8.....	Door Catch (c/w Bolt)	WODC.1461A	.....	Firebrick Set.....	BRIC.SUMMA
9.....	Ash Lip	SINS.50374523	30....	Replacement Blower Assembly	
10....	Quadrant Shield.....	3536.01	.....	Right Blower Assy	SPND.502454
11....	Casing Bottom	3501	.....	Left Blower Assy.....	SPND.502453
12....	Casing Side, Right.....	3503.5	31....	Standard-Size Surround Assembly, Embossed Panels	
13....	Front Panel, Right.....	SINB.3543	.....	3/4" wide x 32" high	
14....	Secondary Air Box Gasket.....	5068.3237	.....	Over-Size Surround Assembly, Plain Panels	
15....	Secondary Air Box (c/w Gasket).....	SUMM.3140	.....	52 3/4" wide x 34" high (not shown)	
16....	Quadrant Cover	3514	32....	Control Box Mount, Right.....	3512
17....	Air Shutter Assembly (c/w Spring, Washer and Cap).....	SUMM.531	33....	Control Box Mount, Left	3529
18....	Glass Clamp Kit (c/w Screws)	SUMM.1425	34....	Control Assembly.....	SPND.4583
19....	Glass Bar Kit (2 pcs.).....	SUMM.212501	.....	Cover Plate(not shown)	4593
.....	Glass Gasket Kit (not shown)	2083.01	35....	SINS Regular Trim, Black	SINS.35192
20....	Rep. Glass (c/w Glass Gasket).....	DR46.GLKIT	.....	SINS O/S Trim, Black (not shown).....	SINS.35492
21....	Door Gasket Kit	DR31.WDGKIT	All parts may be ordered from your nearest Pacific Energy dealer. Contact Pacific Energy for the location of the dealer nearest you.		
22....	Door Casting, Arched Black.....	CAST.46ST			
.....	Door Casting, Arched Gold.....	CAST.46GDA			
.....	Door Casting Arched Nickel.....	CAST.46NI			
.....	Door Casting Arched Brushed Nickel.....	CAST.46BNA			

Fig. # 32



Label



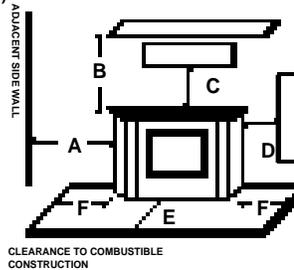
LISTED SOLID WOOD FUEL FIREPLACE INSERT / APPAREIL DU TYPE INSERTION DE COMBUSTIBLE SOLIDE DE CHEMINÉE CERTIFIED FOR USE IN CANADA AND U.S.A./CERTIFIÉ AU CANADA ET AUX ETATS-UNIS
TESTED TO / ÉPROUVÉ SELON:
ULCS628-93 / UL1482 (2010)

MODEL / MODÈLE: SUMMIT INSERT SERIES / SÉRIE: B

INSTALL AND USE ONLY IN ACCORDANCE WITH PACIFIC ENERGY'S INSTALLATION AND OPERATING INSTRUCTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT CODES, RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA. INSTALL AND USE ONLY IN MASONRY OR FACTORY BUILT FIREPLACE. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.
 COMPONENTS REQUIRED FOR INSTALLATION : FULL FLUE LINER CONFORMING TO CAN/ULC-S635 OR CAN/ULC-S640. IN U.S.A. FLUE LINER CONFORMING TO UL-1777 OR DIRECT FLUE CONNECTION ASSEMBLY.
 ELECTRICAL RATING 115V, 60HZ, 1.1 AMP. ROUTE POWER CORD AWAY FROM UNIT.
 FOR USE WITH SOLID WOOD FUEL ONLY. DO NOT USE GRATE OR ELEVATE FIRE-BUILD WOOD FIRE DIRECTLY ON HEARTH. REPLACE GLASS ONLY WITH CERAMIC GLASS. INSPECT AND CLEAN CHIMNEY FREQUENTLY-UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY. OPERATE ONLY WITH FEED DOOR CLOSED. OPEN TO FEED FIRE ONLY.
OPTIONAL COMPONENT: MANTEL SHIELD PART# SINB.MSMBKA

**MINIMUM CLEARANCE TO COMBUSTIBLES (MEASURED FROM INSERT BODY)
 DÉGAGEMENT MINIMUM AUX COMBUSTIBLES**

- A) ADJACENT SIDEWALL / PAROI LATÉRALE ADJACENTE 203 MM / 8 IN
- B) MANTEL 660 MM / 26 IN
- MANTEL WITH SHIELD 508 MM / 20 IN
- MANTEL AVEC LA PROTECTION
- C) TOP FACING / REVÊTEMENT SUPÉRIEUR 660 MM / 26 IN
- D) SIDE FACING / REVÊTEMENT LATÉRAL 203 MM / 8 IN
- E) FIRING SIDE, CANADA 457 MM / 18 IN
- FIRING SIDE, U.S.A. 406 MM / 16 IN
- EPREUVE DU FEU
- F) OTHER SIDES 200 MM / 8 IN
- AUTRES CÔTÉS.



INSTALLEZ ET UTILISEZ SELON LES INTRUCTIONS D'INSTALLATION ET D'OPÉRATION DU PACIFIC ENERGY. BÂTIMENT OU POMPIERS LOCAUX DE CONTACT AU SUJET DES CODES, RESTRICTIONS ET D'INSPECTION D'INSTALLATION DANS VOTRE SECTEUR. INSTALLEZ ET EMPLOYEZ SEULEMENT EN MAÇONNERIE OU CHEMINÉE CONSTRUITE PAR USINE. NE RELIEZ PAS CETTE UNITÉ À UNE CONDUITE DE CHEMINÉE DE CHEMINÉE SERVANT UN AUTRE APPAREIL. MATERIEL REQUIS POUR L'INSTALLATION: PLEIN REVÊTEMENT DE CONDUITE DE CHEMINÉE CONFORMÉMENT À CAN/ULC-S635 OR CAN/ULC-S640. ÉLECTRIQUE 115V, 60HZ, 1.1 AMP. ITINÉRAIRE POWERCORD À PARTIR D'UNITÉ. POUR UTILISATION AVEC COMBUSTIBLE AU BOIS SEULEMENT. N'UTILISEZ PAS LA GRILLE OU N'ÉLEVEZ PAS LE FEU EN BOIS DE FIRE-BUILD DIRECTEMENT SUR LE FOYER. REMPLACES LA VITRE AVEC UNIQUEMENT DE LA VITRE CÉRAMIQUE. INSPECTEZ ET NETTOYEZ LA CHEMINÉE FRÉQUEMMENT-DANS CERTAINES CONDITIONS D'UTILISATION, L'HABILLAGE DE CRÉOSOTE PEUT SE PRODUIRE RAPIDEMENT. OPÉREZ SEULEMENT AVEC LA PORTE D'ALIMENTATION FERMÉE. OUVREZ-VOUS POUR ALIMENTER LE FEU SEULEMENT.



MANUFACTURED BY:
 PACIFIC ENERGY FIREPLACE PRODUCTS LTD.
 2975 ALLENBY RD., DUNCAN, BC V9L 6V8



CAUTION

HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS.

U.S. ENVIRONMENTAL PROTECTION AGENCY
 CERTIFIED TO COMPLY WITH JULY 1990
 PARTICULATE EMISSION STANDARDS

DATE OF MANUFACTURE											
J	F	M	A	M	J	J	A	S	O	N	D
2011	2012	2013	2014	2015	2016						

MADE IN CANADA

181012

5050.7621

SINB-1

The certification label is located on the left side casing of the insert.





PACIFIC ENERGY FIREPLACE PRODUCTS LTD.

Technical Support: 1-250-748-1184

www.pacificenergy.net

2975 Allenby Rd., Duncan, B.C. V9L 6V8