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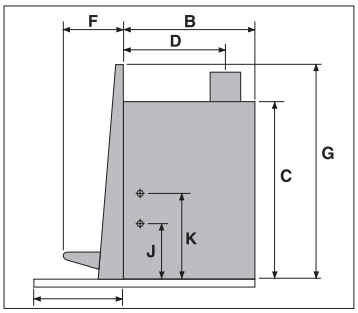
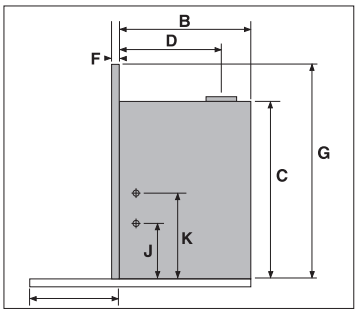
Wood Fire Installation & Owner's Operation Manual





metrofires

Insert Wood Fires

NZHHA New Zealand Home Heating Association Inc.

NEW ZEALAND MADE

PIONEER MANUFACTURING LIMITED

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⚠ WARNING! Important Information

- **WE HIGHLY RECOMMEND YOU READ THIS ENTIRE MANUAL AS INCORRECT OPERATION, MISUSE AND/OR LACK OF MAINTENANCE WILL VOID THE WARRANTY**
- The appliance and flue-system shall be installed in accordance with AS/NZS2918 and the appropriate requirements of the relevant building code or codes
- Any modification of the appliance that has not been approved in writing by the testing authority is considered to be in breach of the approval granted for compliance with AS/NZS4013 and will void the warranty
- The appliance must be installed correctly. We recommend a competent and suitably qualified NZHHA installer

⚠ CAUTION! Important Information

- Mixing of appliance or flue-system components from different sources or modifying the dimensional specification or components may result in hazardous conditions. Where such action is considered, the manufacturer should be consulted in the first instance
- Do not install a Metro fire if there is any sign of visible damage to the product
- This appliance must be regularly maintained.
- Use authorised Metro replacement parts only. The use of unauthorised parts may void the warranty
- This manual MUST be left with the home owner

Metro insert fires are tested to comply with AS/NZS 2918:2001 incorporating Appendix 'E' when installed in accordance with this manual. Please ensure you are fully conversant with this relevant standard and the contents of this manual. Correct installation is critical to the safe operation and performance of this wood fire.

Please take particular note of the following:

- ECO Metro's should be installed with a Metro ECO flue system which has been developed to enhance the performance of Metro wood fires. A minimum length of 4.1 metres of 150mm diameter is required. Any alternative flue system must have a minimum flue pipe length of 4.1 metres of 150mm diameter flue pipe & have been tested to AS/NZS2918:2001
- All flue joints must be sealed and riveted in three points with stainless steel or monel rivets; the bottom of the flue in particular MUST be fully sealed into the flue outlet of the Metro wood fire and secured with the bolt & nut as supplied in the component kit
- The 150mm flue pipe must be fully encased to the underneath of the flashing cone, from above the chimney breast. (there must not be any 150mm flue pipe exposed)
- Ensure a fibreglass seal is placed between the outer cabinet and the masonry to prevent air from within the room being drawn into the chimney cavity
- In New Zealand, the Metro Insert must be bolted securely to the base of the chimney cavity to comply with the seismic restraint provisions of AS/NZS2918.2001
- The Trend fascia is coated in vitreous enamel and the Smart fascia is available in both vitreous enamel and metallic black high temperature paint finish. Take care during assembly and when lifting and fitting the fascia that you do not damage the vitreous enamel coating. Any surface damage to the paint finish Smart fascia can be repaired with the use of Pioneer high temperature paint.
- DO NOT lift the Insert fascia with your fingers under the louvre's.

Assembling your Metro wood fire

All Metro Insert wood fires are packed in two heavy-duty cartons. The Insert firebox is supplied in a heavy duty palletised carton, this carton is clearly labelled. The fascia and door are packaged inside a smaller separate carton. This carton is also clearly labelled to show the colour and coating finish of the fascia and door. Metro fascia's are coated in either vitreous enamel or high temperature paint. Having removed the packaging and located this manual, familiarise yourself with the diagrams on pages 3 & 4, and proceed as detailed.

Note: The Metro carton shows the model Metro you are about to install, enabling you to select the appropriate model's assembly instructions.

ECO Insert Fan (ECO Trend Insert model only)

In all clean air zones, the Metro ECO Trend Insert must be installed with Metro's ECO Insert fan which is a single speed, thermostatically controlled device. This fan must be permanently wired and therefore requires the services of a registered electrician. Fitting instructions for the fan are supplied with the fan module

Pre installation - Firebox cavity

Prior to installing your Metro insert firebox into a fireplace cavity, it is important that specified clearances and other requirements are complied with as follows:

- The chimney must be swept and checked for cracks and general overall condition. If repairs are necessary, they must be carried out by a suitably qualified person
- Check the cavity dimensions to ensure the fireplace insert will fit. It is usually necessary to remove fire bricks from the lower fireplace cavity
- The base of the fireplace cavity on which the Metro fireplace insert will rest must be level. If it is not, it should be levelled using mortar
- If an ash removal door exists in the base of the fireplace cavity it should be sealed shut to prevent air entering the cavity
- If a timber or combustible mantel shelf exists above the fireplace Insert opening, it should be a minimum distance above the top of the Metro's fascia. If less than the minimum specified, a heat shield will be required to be fitted under the mantelshelf using the relevant detail as set out in AS/NZS 2918:2001. Mantle clearances are detailed on page 5.

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Metro Insert firebox

- Remove from within the firebox the plastic bag containing the bolt kit, two firebricks wrapped in a cardboard wrapper and then the top baffle assembly
- A 'spacer' washer has been pre-fitted and taped to the top door hinge pin on the left hand side of the firebox (Refer Inset A) remove this tape
- Remove the 'cabinet top' which is packed inverted on top of the firebox and fit it into position over the cabinet sides as detailed in Diagram 1. Ensure the rear edge is fitted correctly as shown Diagram 1, Inset 'B', the rear edge of the cabinet top must fit into the slot provided. Lift the front to the highest available position and using two of the self tapping screws from the plastic bag, secure the cabinet top in place taking care to not damage the insulation blanket.

Note: This panel can be fitted at two height's. If the height of the fireplace opening will allow, fit the cabinet top in the higher position, fit screws from inside the cabinet facing out.

- Ensure the insulating blanket is in position on the top of the cabinet and remains in a sound condition
- Remove the four speed clip nuts from the plastic bag and fit them to the holes provided in the front edge of the cabinet as shown in Diagrams 1 and 1A
- Next you need to fit the top baffle.

All insert models feature a two piece top baffle which locates onto six lugs provided on the side walls of the firebox's upper chamber, as detailed in Diagram 2 on page 4. The rear baffle section is 6mm folded steel and has a central locating pin fitted to its front top surface. Fit this rear baffle through the door opening and into position in the upper chamber of the firebox. It is supported on the rear four support lugs and must be hard back against the rear wall of the firebox with the central locating pin facing up and towards the front.

Next, locate the front baffle which is a combination baffle comprising of a 6mm steel plate with a promet (white board) front extension. Fit this baffle through the door opening and into position, ensuring the hole provided on its rear edge is positioned over the locating pin fitted to the rear baffle.

Unwrap the two firebricks from the cardboard wrapper and fit the side bricks to each side of the firebox. Location lugs are fitted to the base and rear of the firebox to retain the side bricks in position, refer to the relevant Diagram 2 on page 4.

Assemble the air slide located in the firebox to the primary air inlet. First remove the bolts and spacer washers and re-install with the air slide in place with the air control tab to the right hand side. Ensure the stepped washers are inside the slots provided and tighten the bolts. Check the slide moves freely left to right before proceeding.

Diagram 1 - ECO & LTD Insert Firebox

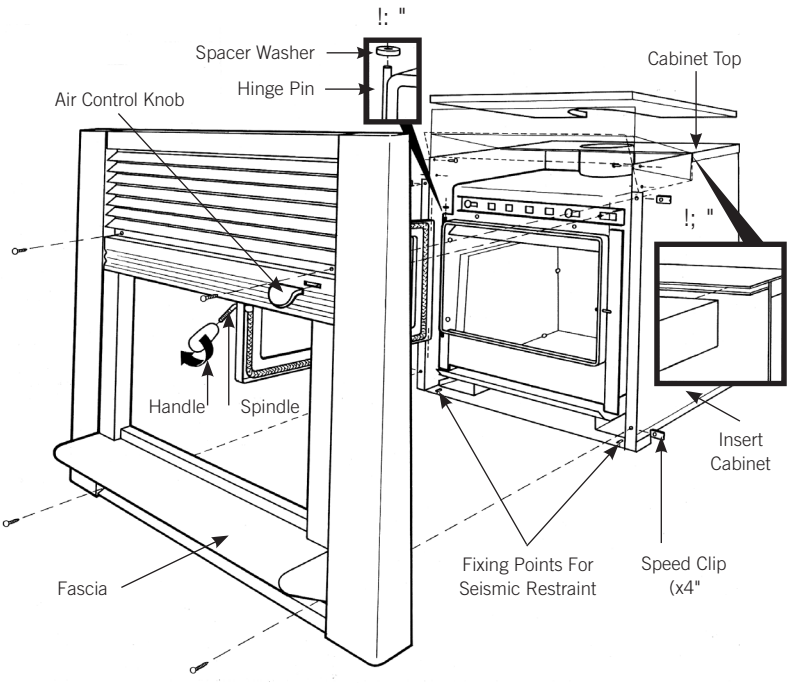
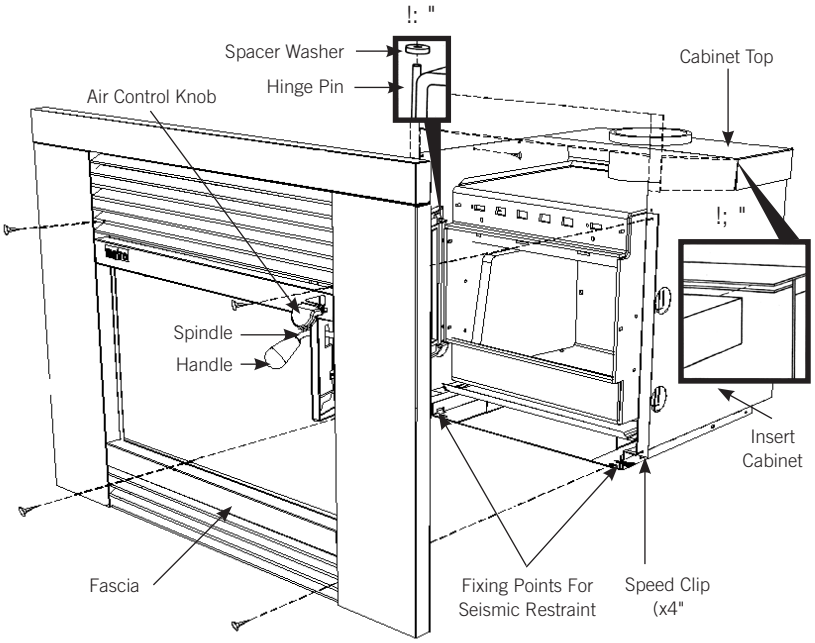


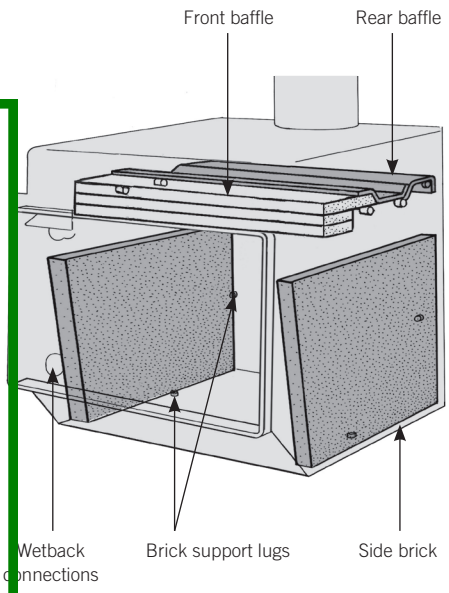
Diagram 1A - Smart Insert & LTD Smart Insert Firebox



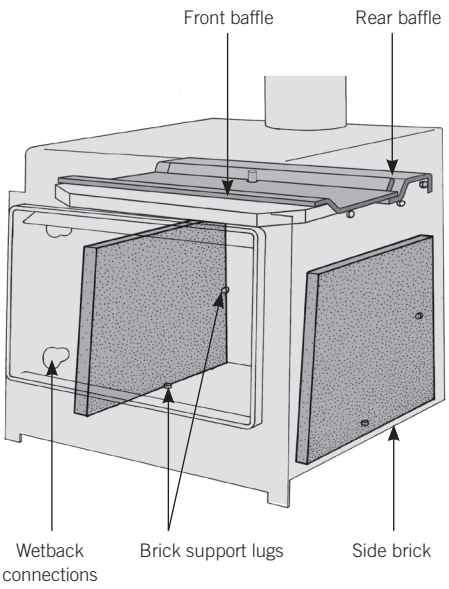
Assembling your Metro wood fire

Diagram 2 - Firebox brick and baffle locations

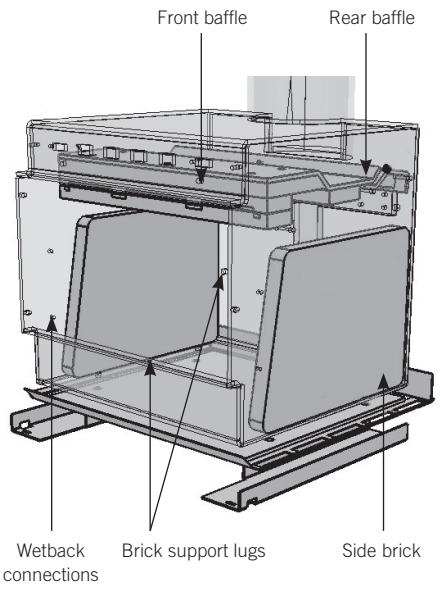
ECO Insert Firebox



LTD Insert Firebox



Smart Insert & LTD Smart Insert Firebox



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Assembling the fascia (Trend Insert models only)

Trend fascia's are supplied partly assembled, and require the ashlip and bottom louvre to be fitted as illustrated in Diagrams 3 and 3A below. To assemble, proceed as follows: -

- On a large flat, clean and soft surface (carpet floor) slide the fascia out of the carton, front face down and remove the door which is packed into a separate carton located in the centre of the fascia. Close the flaps of the fascia carton and lay the fascia front down on top of this now empty carton
- Remove the two sections of tape securing the ashlip panel to the rear face of the fascia as detailed in Diagram 3. Carefully lift the ashlip panel away from the fascia and place it gently to one side
- Remove the four screw's and bottom louvre as illustrated in Diagram 3.
- Reposition the ashlip into its final position as illustrated in Diagram 3A taking particular attention to ensure:
  - The ashlip is the right way around
  - Do not mark the coating on the ends of the ashlip panel as you slide it into the fascia, you may need to slightly prise apart the fascia side panels as you fit the ashlip.
- Position the bottom louvre as illustrated in Diagram 3A and refit the four screws previously removed.

The fascia is now completely assembled and ready for installation. When moving the fascia, hold it at both sides to avoid 'twisting' the fascia which may cause the enamel to chip.

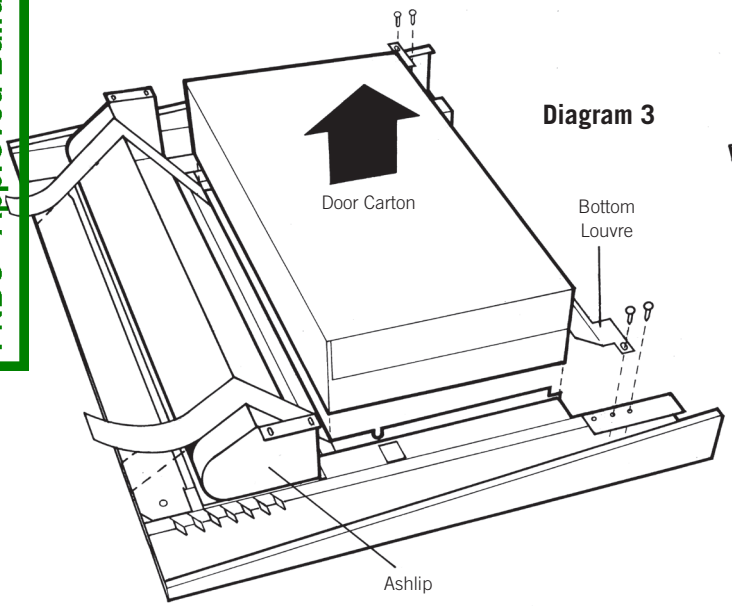

Diagram 3

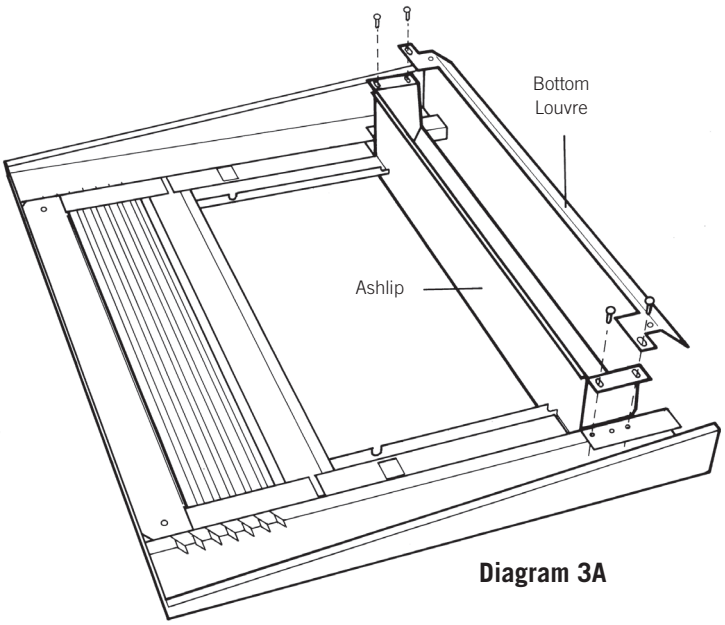

Diagram 3A

Floor protector requirements

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Floor protector requirements

Metro fireplace inserts are designed to be installed directly onto a concrete base. The floor protector is required to project in front of the Metro and must extend a minimum of 200mm to each side of the door opening making the minimum floor protector width 825mm.

The floor protector must project from behind the fascia the distance specified (I) in the table below. Minimum projection is the distance from the front of the wall lining (behind the fascia) to the front non combustible point of the floor protector.

ECO Trend Insert

On properties less than 2 hectares, the ECO Trend Insert must be installed with the single speed Metro thermo fan.

The ECO Trend Insert requires an ash-hearth floor protector with recommended construction of tiles on 6mm thick non combustible board. The minimum floor protector projection forward of the Metro is 300mm as detailed in the table below. Any non-combustible material fixed directly to a combustible floor is acceptable.

LTD Trend Insert

The LTD Trend Insert requires an insulating floor protector. The forward projection is dependent on the height of the fireplace insert above the combustible floor. The schedule of projections listed for heights of 0mm to 41mm+ can be achieved by the thickness of the floor protector, raising the Insert or a combination of the two. Recommended construction is tiled eterpan with a combined thickness as detailed in the table below.

Smart Insert

The ECO Smart Insert requires an insulating floor protector with recommended construction of tiles on 26mm thick eterpan or alternative insulating material of equivalent insulation properties. The forward projection detailed below (I) is dependent on the height of the fireplace insert above the combustible floor.

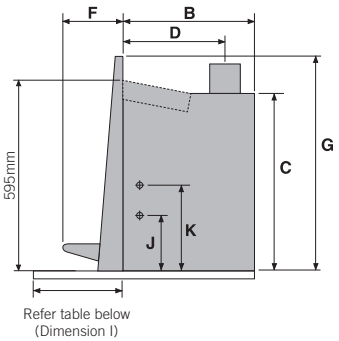
LTD Smart Insert

The LTD Smart Insert requires an insulating floor protector with recommended construction of tiles on 26mm thick eterpan or alternative insulating material of equivalent insulation properties. The forward projection detailed below (I) is dependent on the height of the fireplace insert above the combustible floor.

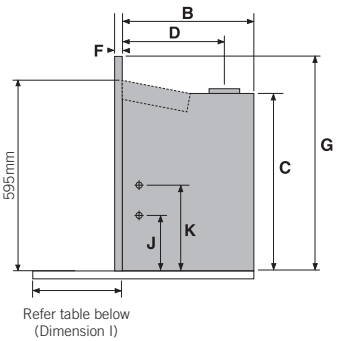
Mantel clearance

A timber or combustible mantel shelf above the fireplace Insert opening should be a minimum distance (L) above the top of the Metro's fascia as detailed in the table below. If the clearance is less than the minimum specified, a heat shield will be required to be fitted under the mantelshelf using the relevant detail as set out in AS/NZS 2918:2001.

ECO Trend & LTD Trend Insert



Smart Insert models



Insert & Built-In Dimensions (mm)	A	B	C	D	E	F	G	H	I	J	K	L
	Firebox Width	Firebox Depth	Firebox Height	Flue Centre	Fascia Width	Fascia Depth	Fascia Height	Minimum Floor Protector Width	Minimum Floor Protector Projection	Wetback In	Wetback Out	Mantel clearance
ECO Trend Insert	560	500	550	405	810	185	650	825	300	170	360	340
LTD Trend Insert	560	500	550	405	810	185	650	825	350	170	360	460
Smart Insert	560	495	550	405	890	30	672	825	312	130	325	475
LTD Smart Insert	560	495	550	405	890	30	672	825	312	130	325	475

Please note: All measurements detailed above exclude the 13mm insulating blanket.

Floor Protector Heights	0mm	10mm	15mm	20mm	25mm	30mm	35mm	40mm	41mm+
ECO Trend Insert - DIMENSION I	300mm minimum projection is required irrespective of the height of the floor protector								
LTD Trend Insert - DIMENSION I	455mm	455mm	445mm	436mm	424mm	408mm	396mm	366mm	350mm
Smart Insert - DIMENSION I	395mm	371mm	371mm	353mm	353mm	332mm	332mm	312mm	312mm
LTD Smart Insert - DIMENSION I	395mm	371mm	371mm	353mm	353mm	332mm	332mm	312mm	312mm

Installation

Position the Metro Insert firebox which is still attached to its wooden pallet directly in front of the fireplace cavity with the rear of the insert facing the fireplace opening. The fireplace insert assembly is bolted to the wooden pallet through its base panel at two points being each front corner. Remove both screws and slide the insert into the fireplace cavity taking care not to mark the floor protector. Discard the pallet.

1. Attach the fascia with the four longer screws that were supplied in the plastic bag, taking care that the air control lever passes through the slot provided in the fascia. Centralise and level the fascia on the fireplace insert door and secure the four screws.
2. Applying pressure to the fireplace firebox (not the fascia) carefully manoeuvre the Metro until the rear of the fascia is just touching the front face of the fireplace surround. Taking care not to move the fireplace insert, remove the fascia and mark the position of the fireplace insert onto the fireplace base.
3. Using a masonry drill, drill into the chimney base through the two slots which the fireplace insert was secured to the pallet through. Check to ensure the fireplace insert hasn't moved and secure using suitable masonry anchors to comply with the seismic restraint provisions of the standard.
4. Check that the flue stub of the fireplace insert is in line by looking down the chimney, if not a stainless steel offset or flexi flue will be required.
5. Following the instruction sheet supplied with the flue system, proceed and fit the flue with ALL JOINTS SEALED and riveted with a minimum of three stainless steel or monel rivets on each joint.
6. With the flue pipe in position and sealed with a high temperature fire cement into the flue stub, drill through the hole provided in the front of the flue stub into the stainless steel flue pipe and secure with the 6mm bolt and nut supplied in the plastic bag.
7. Refit the top baffle into the firebox's upper chamber. Support by the steel plates only and keep the baffle horizontal.
8. Ensure the cabinet top front panel is installed and fitted correctly to the rear mating section. This panel must be lifted to either it's maximum height or the maximum height allowable with the chimney cavity and fixed in place. The white insulation blanket must also remain in place and intact surrounding the insert cabinet.
9. Using a suitable rated insulation (fibretex 450 or similar) pack any gap that exists between the sides and top of the fireplace insert cabinet and fireplace surround. Do NOT block off the lower convection slots on all three sides in the base of the outer wrap. (ECO Smart Insert model).
10. If installing into a clean air zone, the Metro ECO Insert firebox must be installed with Metro's ECO Insert fan as detailed on page 2. Installation and wiring of this fan module is necessary prior to fitting the fascia, and full fitting instructions are supplied with the fan module.
11. Take the door you previously removed from the centre of the fascia and unpack it. Taking the door in both hands with the spindle end in your right hand and outer face of the door facing you, attach the door to the firebox as follows: -
    - With the door in a 45 degrees open position, allow the lower hinge pin on the bottom left hand side of the firebox to pass into the hole provided in the bottom of the door frame
    - Lift the door until the top of the door frame passes over the top hinge pin, then align the hole provided on the top face of the door frame and lower it down over the top hinge pin
- Take the door handle from the plastic bag and screw it onto the door spindle by turning it clockwise
12. Re-attach the fascia, centralise and level with the door and ensure the air control is moving freely and secure all four screws.
13. Locate the air control knob which is included in the plastic bag and carefully work it onto the air control lever. Check operation.

The Metro is now fully installed and ready for operation but it is preferable to defer lighting the fire for a day or two if possible to allow sealant used in the flue pipe joints to air dry. Alternatively it is recommended you burn 2-3 sheets of loosely crumpled newspaper at a time, approx once every hour over a 6-8 hour period.

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Wetback installation

⚠ WARNING! Important Information

- DO NOT connect to an unvented hot water system
- Install in accordance with AS 3500.4.1 or NZS 4603 and the appropriate requirements of the relevant building code or codes.

⚠ CAUTION! Important Information

- Fitting the water heater is best performed prior to installing the Insert firebox into the fireplace cavity
- Wetbacks must be connected with water before operating the fire and available to the wetback while the fire is in operation
- Wetback systems are not suitable for use in locations where the water supply has lime content. Lime build up inside the coil will eventually block the coil causing the wetback to fail. This is not covered under warranty
- Rainwater collection tanks installed lower than the wetback that use a water pump to supply the home, can cause problems if the pump is not operational. In these situations either the type of wetback or a roof header tank should be considered
- The Metro ECO Trend Insert is not approved with a wetback in a clean air zone but can be installed with either Pioneer's 3kW or 4kW wetback option on properties of 2 hectares or greater.

Wetback	Suitable for models:
Smart Booster 	• Smart Insert • LTD Smart Insert
3kW Wetback 	• ECO Trend Insert (properties of 2Ha+ only) • LTD Trend Insert
4kW Wetback 	• ECO Trend Insert (properties of 2Ha+ only) • LTD Trend Insert

Water heating is another key feature of your Metro Insert wood fire; all Metro Insert models can be fitted with a wetback, which are designed to give maximum output with minimal effect on the operation of the fire. Only the Pioneer cast jacket wetback system should be fitted to your Metro; alternative wetbacks will void the Metro's emission approvals and may seriously affect the performance of the appliance and void its warranty.

All Insert model wetbacks can be fitted to either side of the firebox, with the connection pipe heights detailed in the table below.

It is recommended the return pipe has a minimum rise of 1 in 12; performance will reduce as the distance to the storage cylinder increases.

Wetback installation for the ECO and LTD Trend Insert

The Metro ECO Trend Insert is not approved with a wetback in a clean air zone but can be installed with either Pioneer's 3kW or 4kW wetback option on properties of 2 hectares or greater.

Pioneer's 3kW and 4kW wetback options are fitted internally to either side of the ECO Insert firebox and LTD Insert firebox.

To fit the 3kW or 4kW wetback proceed as follows

1. Remove the brick from the inside of the firebox from the side the wetback is to be fitted too.
2. Expose the holes in the firebox wall through which the connection pipes will pass.

   The ECO and LTD Insert fireboxes have 3mm pressed washers covering these two openings and two 6mm bolts which are fitted inside the firebox near the connection holes, remove these also.
3. Using a hole saw or snips, prepare the cabinet for the connection pipes. Note, these holes should be a neat fit or have any excess gap covered or filled with high temperature insulation.
4. Using the tube of sealant supplied with the wetback, apply a liberal bead of sealant around both connection holes on the inside of the firebox. On the rear of the wetback casting apply the remaining contents of the tube equally around both connection pipes and also the outer circumference of the wetback which will face the inside rear wall of the firebox. This will completely seal the wetback to the inside rear wall of the fire on installation.
5. Fit the wetback into the firebox and position the connection pipes through the connection holes in the firebox.
6. Fit two bolts through the slots provided in the wetback, align the wetback so its front edge is parallel to the door opening and secure the bolts.
7. The wetback is now ready for connection to the storage cylinder by a registered plumber.

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Wetback installation

Wetback installation for the Smart Insert & LTD Smart Insert

The Smart Insert water heater comes fully assembled and is designed to be fitted to the outside face of either the left or right hand side of the firebox.

Note: The hot water output of this water heating device is dependent on correct installation and the proximity of the Smart Insert to the hot water storage cylinder.

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To fit the Smart booster proceed as follows

- The closer the Smart Insert is to the hot water storage cylinder, the greater the hot water production will be, and generally distances over 3 metres are not recommended
- The return hot water connection copper pipe must be insulated and have a minimum rise of 1 in 12 along its entire length. 1 in 12 is minimum and the greater the rise the better the performance
- The return hot water pipe must be connected to the riser pipe connection in the base of the hot water storage cylinder.

1. Remove the fascia (if fitted), then on the side of the firebox to which the water heater is to be fitted, remove the angle cover plate from the inside face of the outer cabinet. Also, remove the fire brick on the wetback side from inside the fire box.
2. Having removed this cover plate the front face of the inner wrap is exposed. Fold the front face of the inner wrap outwards so it is parallel with the outer cabinet. This is needed to create access for the water heater to fit between the firebox and the inner wrap.
3. Remove the two square knock out plates from the front face of the inner wrap to provide clearance for the two connection pipes when the return is folded back.
4. Remove the two 50mm diameter knock out plates from the outer cabinet.
5. With a long handled 10mm set spanner, reach in between the inner wrap and the firebox and loosen the nut on the rear Pozi drive screw which will be used to secure the water heater. Then unscrew from the inside and discard the 6mm nut as the screw will thread directly into the water heater casting. Repeat for the two front bolts but retain the nuts and washers.
6. Remove the water heater from it's box, which also contains a tube of fire cement. You will note a 6mm bolt and washer is fitted to one of the casting ribs, remove this.
7. Smear a "liberal but even" amount of Pioneer fire cement over the entire 'flat face' of the water heater in order to ensure full surface contact with the outside face of the firebox.
8. Hold the hot water heater by the two copper pipes and slide the water heater between the inner wrap and the firebox until the pipes are vertical and in line with the two 50mm holes in the outer cabinet. The pipes will be tight against the outer cabinet as you do this, but the cabinet will flex enough to allow you to work the device until the pipes pass through the 2 x 50mm holes in the outer cabinet.
9. Re-fit one of the bolts previously removed (stage 5) from inside the firebox through one of the two slots provided in the front edge of the water heater casting, and loosely attach the washer and nut to the thread of the bolt.
10. Next pivot the water heater using the first bolt just refitted as a pivot point, and refit the rear pozi drive screw from inside the firebox into the rear tapped hole in the casting. Then refit the remaining front bolt and attach the washer and nut.
11. Fully tighten all three fastenings, and check to ensure the casting has pulled up evenly onto the side of the firebox. Excess fire cement should be visible around the entire perimeter of the casting.
12. Bend the front returns of the inner wrap back into place so it folds around the front of the water heater, then secure the inner wrap to the casting by refitting the 6mm bolt and washer previously removed at stage 6.
13. The water heater is now ready to have the copper pipe work attached for connection to the hot water storage cylinder (brazed joints are recommended)
14. Once all joints have been thoroughly checked and tested for leaks, refit the angle cover plate removed at stage 1, then align and refit the fascia. Both side bricks must be fitted inside the firebox.

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⚠ WARNING! Important Information

- **WE HIGHLY RECOMMEND YOU READ THIS ENTIRE MANUAL AS INCORRECT OPERATION, MISUSE AND/OR LACK OF MAINTENANCE WILL VOID THE WARRANTY**
- Any modification of the appliance that has not been approved in writing by the testing authority is considered as breaching AS/NZS 4013 and will void the warranty
- Do not use flammable liquids or aerosols in the vicinity of this appliance when it is operating
- Do not dry clothes on or near this appliance
- Do not use flammable liquids or aerosols to start or rekindle the fire OR store fuel within the Metro's specified installation clearances
- Never operate your Metro with the door ajar, except on initial start up
- Open the air control fully before opening the Metro's door.

⚠ CAUTION! Important Information

- This appliance should be maintained & operated at all times in accordance with this instruction manual
- This appliance should not be operated with cracked door glass, over worn, faulty or missing door seals
- Do not use driftwood, treated or unseasoned (wet) fuel, the use of most types of preservative treated wood as fuel can be hazardous and will damage your appliance
- Burning unseasoned (wet) fuel or incorrect operation on extended low burn cycles will cause excessive creosote to form. Creosote is very corrosive and excessive buildups will result in the flue pipe, flue spigot and upper burn chamber failing. Failure of the applicance and/or flue system due to creosote damage is not covered under warranty. The formation of such is not an appliance issue it is a fuel and operational issue
- This appliance must be regularly maintained and replacement parts must be authorised Metro parts only
- Do not empty ash into a combustible container.

Congratulations on the purchase of your Metro wood fire

This slow combustion appliance is designed to give you many years of warmth and service, subject to the following key factors. These key factors, if not adhered to are the major causes of unsafe installation, poor performance and flue blockages and potential product failure.

1. Your Metro wood fire must be installed correctly. Metro recommend a competent and suitably qualified NZHHA installer.
2. The only fuel to be used in this appliance shall be wood that meets the following criteria.
   - Less than 25% moisture content
   - Has not been treated with preservatives or impregnated with chemicals or glue,
   - Is not chipboard, particle board, or laminated board,
   - Is not painted, stained or oiled
   - Is not driftwood or other salt impregnated wood
3. The appliance shall be operated at all times in accordance with the 'Installation and Operating Instructions' supplied with each appliance.
4. It is preferable that Metro wood fires should be installed with a Metro ECO Flue System.
5. Coal must not be used as a fuel.

Please also note the following important points:

- In New Zealand a building consent is required from your local building authority. The homeowner is responsible for obtaining this consent
- As correct installation is critical to the performance and safe operation of your Metro, it is recommended your Metro be installed by a NZHHA registered installer or a person suitably qualified in the installation of wood fires. Your Metro retailer will be able to arrange professional installation for you
- During the very first fire your Metro will give off an odour and fumes as the firebox paint cures. Do not be alarmed; open all windows and externally opening doors in that room and close any internally opening doors. This curing process will last for approximately one hour and is likely to happen this one time
- Properly seasoned (dry) timber is necessary for the Metro to operate efficiently; firewood that contains a high moisture content will result in flue pipe blockages, reduce heat output and create other issues.

Note: Once split, Softwood usually takes 12 months to season - Hardwood can take up to 24 months to season - Wood must be stored in a location that enables air circulation. Unseasoned wood stored in a closed woodshed without air circulation will still be unseasoned 12 months later.

- It is critical that the fire not be operated with over worn, faulty or missing door seals. Door seals will harden over time and become over-worn (3-4 year's) this will cause air to leak into the fire, causing the appliance to 'over fire'
- It is critical that the fire not be operated with over worn, faulty or missing bricks, baffle plate, promet extension (white board on the baffle plate)
- It is critical that the fire not be operated with cracked or broken door glass.

Please note, the above 3 points require regular inspection/maintenance (every time the ash bed is cleaned out, generally 3-5 times a season) and if not maintained will void the firebox warranty. A glowing firebox or lower fluepipe is just one sign you are over firing your appliance. Please ensure you keep your proof of purchase/receipt on any parts you purchase.

- A key feature of all LTD Metro's is their ability to burn at a very low rate. To familiarise yourself with correct operation of this feature, please ensure you read the "extended burning" section on page 11 of this manual so as not to void the Metro warranty by incorrect operation
- For optimum performance fuel must be loaded so the logs lay "front to rear" in preference to laying across the width of the firebox. Spaces should be left between the logs to enable oxygen to get to as much of the surface of the fuel as possible
- A small hot fire loaded frequently is more efficient than a large fire burning on a low setting
- Your Metro is covered by a full unconditional 12 month warranty on replacement parts, and a 10 year firebox warranty.

Optional wetbacks

Water heating is another key feature of your Metro wood fire; nearly all Metro models can be fitted with a wetback, which are designed to give maximum output with minimal effect on the operation of the fire. Only the Pioneer cast jacket wetback system should be fitted to your Metro; alternative wetbacks will void the Metro's emission approvals and may seriously affect the performance of the appliance and void its warranty.

If your home is in a classified 'clean air zone', and dependent on requirements/restrictions which may be imposed by your local territorial authority (council) you may or may not be able to install a water heating device. If in doubt consult your local Metro retailer.

Other considerations are:

- Distance from your Metro to the storage cylinder will affect the amount of hot water produced
- Your climate & the manner in which you will 'fire' your Metro will determine the amount of hot water produced.

Note: Wetbacks are not suitable for use in locations where the water supply has lime content. Lime build up inside the coil will eventually block the coil causing the wetback to fail.

Cost Savings

Wetbacks can enable substantial power savings, dependent on the climate in the area in which you live. If you live in a cold climate you are likely to use your Metro for many months of the year, in which case a Pioneer wetback will reduce or even eliminate your water heating costs over those months. If however you live in a warmer climate and use your Metro for only a few hours a day over the colder months, electricity savings will be considerably less.

Water Pressure

A common misconception is that you must have a low-pressure system to have a wetback; this is not true. You must have a 'vented' system and high-pressure cylinders are usually not vented. However you can install an 'indirect' cylinder which contains a secondary coil inside the storage cylinder, enabling you to have a wetback while retaining a high-pressure system.

Wetback	Suitable for models:
Smart Booster 	• Smart Insert • LTD Smart Insert
3kW Wetback 	• ECO Trend Insert (properties of 2Ha+ only) • LTD Trend Insert
4kW Wetback 	• ECO Trend Insert (properties of 2Ha+ only) • LTD Trend Insert

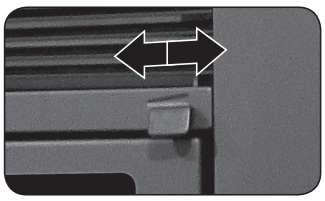
Getting to know your Metro wood fire

Operating your Metro fire is simple and you will quickly learn how to get the best from it. First take a minute to familiarise yourself with your new Metro.

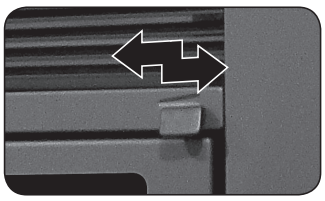
- Raise the door handle anti-clockwise until the latch releases, and then slowly pull the door open. You will note that if you let the door go before it is at 90° to the appliance, it will fall closed. This is a safety feature that ensures the door cannot fall open if it is not latched securely. For the door to remain open, you must open it fully
- There is a single air control making your Metro fire easy to adjust. This control moves from left to right, which is 'low to high'.

All Metro insert fires have an air control knob located directly above and to the right of the door. Slide this control knob gently from right to left until you reach a stop, this is a preset 'low' position. Your Metro must not be operated at a lower burn rate than this pre-set low allows.

Please note: The Metro LTD Trend Insert model enables you to have total control of burn rate from 'high' to 'off'.



Metro Insert air control



LTD Trend Insert - Safety off provision

Safety off provision

The LTD Trend Insert model has a safety 'off' provision which enables the air control to be fully closed during flue pipe cleaning, and more importantly to enable all primary oxygen to the fire to be cut off in the unlikely event of a flue pipe fire. To engage the 'off' provision, lift the air control knob up and move it fully to the left.

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Operating your Metro wood fire

If your Metro has only been installed within the past few days, the fire cement seal at the base of the flue will not be fully cured. To ensure the cement sets without blistering it is recommended you burn 2-3 sheets of loosely crumpled newspaper at a time, approximately once every hour over a 6-8 hour period.

During the very first fire your Metro will give off an odour and fumes as the firebox paint cures. Do not be alarmed. Open all windows and externally opening doors in that room and close any internally opening doors. This curing process will last for approximately one hour and is likely to happen this one time.

Start up

Place a quantity of loosely crumpled newspaper on the base of the firebox until it is approximately half full of paper, or place firelighters on the base of the firebox. Add dry kindling and move the air control knob fully to the right, being the "full open" position.

Light the paper at two or three locations across the front of the door opening and leave the door slightly ajar resting on the latch pin if necessary for a few minutes while the fire establishes. Once the kindling is burning well, open the door and add 2-3 small logs at a time until you have a well-established fire. Usually this will take approximately 30 minutes, during which time the air control should be set on "high" and the door should be closed, except for the initial few minutes and when fuel is being added.

Normal operation

Once the fire is well established, regulate the air control to achieve the desired burn rate and heat output. As you move the air control to the right, burn rate, firebox temperature and heat output will increase, if you move the control to the left they will decrease. Please note:

- Always open the air control fully prior to opening the door, then open the door slowly. Every time you refuel, leave the air control on 'high' for a minimum of 20-25 minutes
- When loading logs, place them end-on, 'front to back'; air spaces should be left between the logs to enable oxygen to get to as much of the surface of the fuel as possible
- Never use the door to force wood into the firebox, as this is likely to break the glass.

Extended burning (rural models only)

It is most important if your Metro is to be refuelled and turned down for an extended period, such as an overnight burn that you operate it correctly:

- The wood used as fuel for extended burning MUST BE FULLY SEASONED (DRY). Once the fuel is loaded, the appliance must be operated on high for a period of at least 20 minutes to drive out residual moisture from the fuel (dry wood is usually 20% water content) and ensure surface area combustion.
- Do not turn the air control down lower than you need to, if you want the Metro to burn overnight, endeavour to obtain an 8 hour burn time, not 12 hours. It will take a few burns to find the correct location of your Metro's air control setting to achieve the length of burn cycle you desire as this setting is affected by several variables including fuel density, flue length and outside wind velocity.
- A smouldering fire over a long time frame is likely to deposit corrosive elements into your system which could be detrimental to your Metro.

⚠ CAUTION! Important Information

- If not operated correctly on extended burn cycles, your Metro is likely to incur flue blockages, corrosion of the upper baffle, lower flue pipe and firebox flue spigot. As these are not covered under warranty if they fail through improper use, it is important you operate your Metro correctly.

Cleaning and maintenance for your Metro wood fire

Your Metro fire will give you many years of efficient service with minimal maintenance if operated correctly using seasoned fuel. Your Metro fire must be regularly maintained and replacement parts must be authorised Metro fires parts only.

Metro Insert fascias

The front panelling of your Metro insert fires fascia will be coated with one of two coating systems, which can be cleaned with a soft cloth when the Metro is not operating. The two alternative coating systems used on Metro insert fascias are:

- Vitreous enamel which is extremely durable and designed to last the life of the appliance. As vitreous enamel is glass, a solid or heavy object dropped or banged against a panel could chip the enamel surface.
- High temperature paint finish which will require periodic repainting to keep it looking its best. This coating is not as durable as vitreous enamel and is susceptible to scratching, so care is required. Fascias coated with high temperature paint can be easily resprayed using Pioneer metallic black paint.

Door glass

Providing your fuel is properly seasoned, under normal operating conditions the air-wash design of the Metro's firebox will keep the door glass clear. If the glass requires cleaning you may use either a razor blade scraper or crumpled wetted newspaper dipped in wood ash rubbed over the glass.

If your door glass breaks it must be replaced with 5mm thick ceramic glass which is available from your local Metro retailer.

Door seals

Over time, usually 3-4 years, the door and glass seals will become hard and cause air to leak into the firebox, causing the appliance to 'over fire'. Your Metro retailer stocks replacement woven fibreglass door and glass seals, which need replacing when they become hard and over worn.

The door of your Metro is easily removed. Hold it in both hands and lift the hinge end of the door up and over the top hinge pin, then lower the door from the bottom hinge pin.

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Side bricks

Hair-line cracks are not uncommon and are a result of the intense heat within the Metro's firebox, coupled with mechanical damage caused by accidental impact when fuel is being loaded. However if the side bricks become cracked to the extent that they start to break up, they must be replaced.

Door adjustment

Provision is available on both sides of the door for adjustment.

To adjust the hinge end of the door, open the door fully, loosen the top hinge nut and slightly lift the latch end of the door; you will see the hinge assembly move back 1-2mm which will usually be sufficient. Retighten, then repeat by loosening the lower hinge nut, this time applying a slight downwards pressure onto the door to move the lower hinge assembly back a similar distance, then retighten.

The door latch is also adjustable, as the latch pin on the right side of the firebox is fitted through a slot which enables the latch pin to be loosened, moved back and re-tightened.

Ash removal

Over a period of time ash will build up in the base of the Metro's firebox and require removal. The time this build-up takes depends on the density and cleanliness of your fuel.

To remove the excess ash your Metro should not be operating.

- Open the door, and using a hearth shovel or similar, empty the excess ash directly into a steel or non-combustible container.
- If the ash is not disposed of immediately, be careful where you store it, as the ash can retain heat for many days and become a fire hazard.
- You must leave a bed of ash in the base of the firebox approximately 10mm deep; this insulates the base of the firebox and improves combustion.

Top baffle

Your Metro Insert fire has a secondary burn chamber which enables it to operate at very high efficiency's. This secondary burn chamber is created by the top baffle which is illustrated on the page 4 of this manual.

This is a 'sacrificial' wear part of the firebox and should be checked monthly. Usually only the promet (white board) front/underneath section needs to be replaced when it starts to disintegrate.

To remove and replace your Metro's top baffle, proceed as follows: -

- Open the Metro's door fully, reach inside with the palm of your hand face up and extended, lift the top baffle approximately 20mm, then lift it forward out through the door opening placing it on a sheet of newspaper you have placed on the front of the hearth. Please Note: -
- Your Metro Insert fire has a two piece baffle as illustrated on page 4. The rear baffle section also lifts 'up and out' the same as the front baffle.
- If your Metro Insert fire is fitted with an internal wetback, to remove the baffle you will need to remove the fire brick from the opposite side of the firebox. Then lift the baffle slightly and slide it forward 30mm, allowing the rear edge of the baffle to drop down in front of the rear support lugs on the side of the firebox you have just removed the brick from. The baffle can then be easily removed through the door opening.
- To refit the top baffle. Proceed in the reverse order and note, the baffle must be fitted so its rear is touching the back of the firebox.

Note: Cracks in the promet are not uncommon and have no adverse effect on the operation of your Metro. These cracks are the result of intense heat coupled with expansion and contraction. Burning wood which is not properly seasoned, i.e. 25% moisture content or more, will over time cause the promet to disintegrate and require replacement.

Circulating fan (ECO Trend Insert only)

In all clean air zones, the Metro ECO Trend Insert must be fitted with Metro's ECO Insert fan, This is a single speed, permanently wired and thermostatically controlled device which runs continuously once the firebox reaches operating temperature. This fan is designed to run continually for many years without service, but should be checked monthly to ensure it is operating. If you are in any doubt regarding the fans operation, refer to your Metro retailer or a registered electrician immediately.

Flue systems

Should be checked annually, particularly the bottom end of the lower flue section at its rear lock formed joint. If deterioration is noticed contact your Metro retailer or installer.

The flue pipe should also be swept a minimum of once a year, or as required during the winter season. If smoke enters the room when you open the Metro's door this usually indicates the flue pipe is becoming restricted and needs cleaning. The frequency of flue pipe cleans depends on many factors, with the main variables being:

- The seasoning of the wood. If not properly seasoned you will require frequent flue pipe cleans.
- The density of the wood. Softwoods generally result in more deposits building up in the flue pipe.

To clean the flue pipe of your Metro, proceed as follows:-

- Open the Metro's door fully, reach inside with the palm of your hand face-up and extended, lift the top baffle approximately 20mm, then lift it forward out through the door opening, placing it on a sheet of newspaper you have placed on the front of the floor protector.
- Close the door and slide the air control to the left.
- Once on the roof, remove the cowl from the top of flue system and sweep the flue pipe using a 150mm-diameter flue pipe brush as detailed in the instructions provided with the fluebrush.
- Once the flue pipe is clear, clean and refit the cowl. Remove the excess soot which has fallen into the firebox, leaving a layer of ash 10mm deep on the base of the firebox, then refit the top baffle.

Note: The baffle must be fitted so its rear is touching the back of the firebox; if uncertain refer to page 4 in the installation section at the front of this manual, which shows illustrations of the baffle location.

Troubleshooting your Metro wood fire

If your Metro is installed correctly, your fuel is dry and you operate your fire correctly, you will find it to be a pleasure to use. Metro's many years of experience within the wood heating industry has shown that dissatisfaction is mainly due to:

- unseasoned fuel
- faulty installation
- operational error
- or a combination of the above 3 points.

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Correct operation

Modern day wood fires need to be operated hard and fast, more so than low and lazy to ensure the firebox and flue pipe runs hot and efficiently. If the fire and flue pipe is up to temperature it will perform extremely well, the smoke will draw up the flue pipe with ease, and the fire will produce good amounts of heat.

If the fire is operated on low a lot of the time, the door glass will run black, the flue pipe will tend to block up more frequently and the fire will end up smoking into the room when reloading. It's better to have a small fire running hard and fast, rather than a big fire running low and lazy.

The following may be of assistance if you are experiencing any problems with the operation of your Metro Fire.

Smoke enters the room when the Metro's door is ajar

(possible reasons and solutions)

Check flue pipe joins

If the flue pipe joins are not sealed correctly, the flue pipe will not draw as well as it should. The flue pipe join connecting into the flue spigot on top of the Metro is most critical, if this is not sealed correctly, smoke will enter the room when the door is ajar. To check this join is sealed correctly, run a match or lighter flame around the join. If the flame is sucked into the spigot then it is not sealed correctly. This check needs to be done when the fire is not going. Ensure you check the rear of the flue pipe/spigot join, as due to the seam in the flue pipe, this is the most common area for not being sealed correctly.

Ensure the fuel you are using is correctly seasoned

If you are burning unseasoned fuel (wet), the fire will cause nothing but problems. The Metro won't deliver much heat, it will be lazy, smoke will enter the room when the door is ajar, and the door glass will run black. Unseasoned fuel is the main contributor to excessive creosote deposits which can be corrosive to your appliance and flue system.

Flue pipe length is too short

Add more flue pipe as the longer the flue system, the better the draw of the flue pipe. Please note, if you did not purchase the Metro ECO Flue System, you will not have the ECO Cowl which increases draw. We highly recommend the Metro ECO Cowl is fitted as this will increase the draw. If you already have an ECO Cowl and smoke is still entering the room, please add another 600mm length of flue pipe.

Downdraft/Turbulence blockage

If you have checked all of the previous factors and the fire is still smoking into the room, it's possible there may be a down draft issue. Down draft is environmental and can be caused by many variables, and it is purely trial and error to ascertain the cause.

Air turbulence and/or negative air pressure influences around the flue termination can be caused by too close or overhanging trees or natural/ artificial ridges etc. Address these where possible or look to extend the flue above the roofline.

Other options may be:

- 'H' Cowl, designed purely for downdraft issues, but if you have an ECO Cowl fitted as standard, you will also need to add another 600mm of flue pipe to compensate as the H Cowl is shorter in length
- Directional Cowl, designed for high wind areas.

Air control setting

Ensure the air control setting is on high before opening the door to reload, as this increases the draw up the flue pipe. Open the door slowly.

If your Metro did not smoke, but its starting too and is getting worse:

The flue pipe is in need of a clean. It is recommended that the flue pipe be cleaned every season, however if you are burning the fire on low a lot, or are using unseasoned fuel, flue pipe cleans will be required more frequently.

Other issues you may experience

I can smell smoke in the room after a low burn cycle

The smell is creosote that will be seeping through the flue pipe join or out of the flue spigot onto an external surface, thus creating the smell in your room. The cause will be either unseasoned fuel, fuel mass too large, incorrect operation on low burn cycles or a combination. Creosote is very corrosive and excessive buildups will result in the flue pipe and potentially the flue spigot and upper burn chamber failing. The formation of excessive creosote is not an appliance issue, it is a fuel and operational issue. Failure of flue pipe or firebox due to creosote build up is not covered under warranty as excessive creosote build up is only possible from either unseasoned fuel or incorrect operation.

The Metro won't turn down as much as it did

The door itself may need readjusting, the hinge and latch is slotted and allows for movement. Loosening the hinge and moving it back a few mm will make the door seal tighter and stop air leaking into the fire. The door and glass seals may be in need of replacing, which is generally required every 3-4 years.

Familiarise yourself with the instructions on page 11 before proceeding with this maintenance.

Warranty details for your Metro wood fire

Metro wood fires are manufactured in New Zealand, using the highest quality of materials, workmanship and the latest manufacturing techniques, which is why we offer a full 10 year firebox warranty and a 1 year parts warranty for your peace of mind.

Metro Warranty

(NZ Consumer laws apply to this warranty)

Pioneer Manufacturing Limited (Pioneer) warrants the steel firebox against defective materials and workmanship which would render it unfit for normal domestic use, from the date of purchase by the original consumer, for a period of 10 years.

Components including panel coating, door retainers, door seals, glass, trim, baffle & bricks are warranted for a period of 1 year from the date of original purchase for normal domestic use against defective materials and workmanship.

All associated accessories including, but not limited to, fans, flue systems, flue shields, wetbacks, tool sets, ash pots etc, are covered by a 1 year warranty against defective materials and workmanship.

It is recommended, but not a condition of this warranty, that a full service/inspection of the Metro fire be carried out at the end of each winter season.

Warranty Conditions

- The Metro fire must be installed, operated and maintained strictly in accordance with the building code and this installation and operation manual
- The Metro fire must be installed and used in a domestic application
- This warranty covers appliance like for like replacement or repair at the manufacturer's discretion but excludes freight, travel, installation, labour and/or any other associated costs
- Pioneer or their agents are not liable for any loss or expense direct or indirect arising from the failure of any part or operation of the appliance
- Operation of this appliance in violation of the warnings in this operation and installation manual will void this warranty
- Your Metro fire must be regularly maintained and we recommended it is also serviced annually. Proof of servicing may be required. If a wood fire is not regularly maintained and serviced, the life span will be reduced. If your Metro wood fire has been neglected, by not being regularly maintained and serviced, warranty may be declined

⚠ CAUTION! Important Information

Note: The following 3 points require regular inspection/maintenance (every time the ash bed is cleaned out, generally 3-5 times a season) and if not maintained will void the firebox warranty. Please ensure you keep your proof of purchase/receipt on any parts you buy.

- It is critical the fire not be operated with over worn, faulty or missing door seals. Door seals will harden over time and become over-worn (3-4 year's) and will cause air to leak into the fire, causing the appliance to 'over fire'. Do not operate the fire with cracked, or broken door glass
- It is critical the fire not be operated with over worn, faulty or missing bricks, baffle plate or baffle extension (white board on or under the baffle plate)
- A claim under this warranty should be directed to the retailer who supplied the Metro fire. If this is not possible write directly to the manufacturer stating details of fault, model, serial number of your Metro, dated proof of purchase and name of retailer purchased from.

Warranty Exclusions

(This manufacturer's warranty does not cover)

- Service calls which are not related to any defect in the product (i.e. operational, installation or fuel issues). The cost of a service call will be charged if the problem is not found to be a product fault
- Defects caused by factors other than normal domestic use or use in accordance with the product's operation manual
- Defects caused through the product being operated in an 'over-fired' manner resulting in sections of the firebox operating excessively hot to the point that sections glow red. (Note – This will result in distortion of the firebox)
- Defects to the product caused by accident, neglect, misuse or act of God
- The cost of repairs carried out by non-authorised repairers or the cost of correcting such unauthorised repairs
- Required maintenance as set out in this manual.

Service under this manufacturer's warranty must be provided by a repairer authorised by Pioneer Manufacturing Ltd. Such service shall be provided during normal business hours.

⚠ IMPORTANT! Complete and retain these details at time of purchase:

Purchase Date	
Serial Number	
Model	
Colour	
Retailer	

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Parts guide for your Metro – Promet, baffles and wetback options

Your Metro wood fire must be regularly maintained and we recommended it is also serviced annually. If a wood fire is not regularly maintained and serviced, the life span will be reduced.

If your Metro wood fire has been neglected, by not being regularly maintained and serviced, with authorised Metro parts replaced as required, your warranty may be declined.

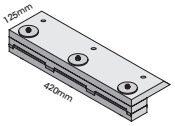
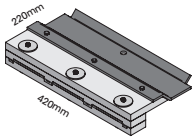
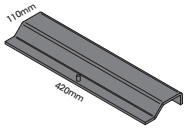
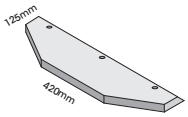
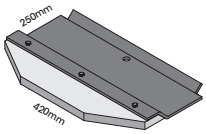
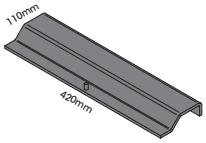
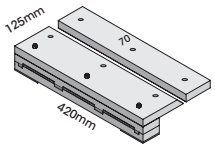
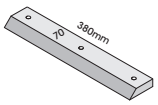
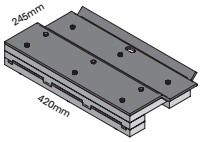
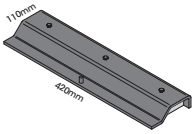
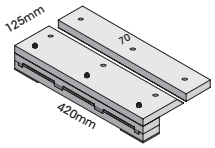
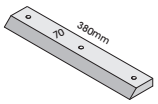
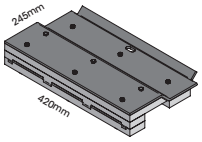
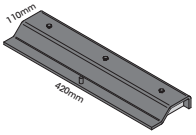
Listed below are the parts and product codes for your Metro wood fire. The promet/baffle should be regularly checked and must always be in place during the operation of your fire.

The baffle should be resting on four support lugs (two on each side of the firebox). It must be hard back against the rear of the firebox with the 'promet extension' (white board) or return front steel edge of the baffle facing forward.

Hairline cracks in the promet extension are not uncommon and will have no adverse effect on the operation and performance of your Metro wood fire. These cracks are the result of intense heat coupled with expansion and contraction and is normal wear and tear.

If the promet extension starts to break up and pieces fall into the firebox it must be replaced.

Note: Impact damage when loading wood and burning wood which is not properly seasoned, i.e. 25% moisture content or more, will cause the promet to disintegrate and require replacement. Always burn dry well seasoned wood and take care when loading wood into the firebox.

Model	Type of promet required / Type of steel baffle(s) required				Wetback options
ECO Trend Insert	ECO Small Promet 500-1650 	ECO Insert Front 500-2250 	ECO/LTD Insert Rear 500-2300 		No wetback if this fire is installed in a clean air zone. The 3kW or 4kW Wetback can be fitted in a non-clean air zone. 3kW Wetback 450-0100 or 4kW Wetback 450-0150
LTD Trend Insert	LTD Small Promet 500-1700 	LTD Insert Front Baffle 500-2850 	ECO/LTD Insert Rear Baffle 500-2300 	3kW Wetback 450-0100 or 4kW Wetback 450-0150 	
Smart Insert	Smart Front Promet 500-1675 	Smart Rear Promet 500-1800 	Smart Front Baffle 500-2350 	Smart Rear Baffle 500-2400 	Smart Booster 450-0350 
LTD Smart Insert	Smart Front Promet 500-1675 	Smart Rear Promet 500-1800 	Smart Front Baffle 500-2350 	Smart Rear Baffle 500-2400 	Smart Booster 450-0350 

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Metro wood fire specifications

Metro have a Specifications Brochure available which details relevant compliance data for every model. This brochure is updated annually and details the minimum clearances and specifications for all models, which is generally required when applying for a building consent. See your Metro retailer to obtain a copy, or visit www.metrofires.co.nz

metrofires.co.nz

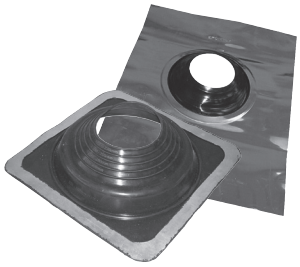
Visit the Metro website: metrofires.co.nz to view Metro's 'video demos' showing the latest in wood fire technology energy saving options. You can view the entire Metro product range, find out where your nearest Metro retailer is located or simply check out the latest specifications, installation requirements and emission and efficiency data for the Metro of your choice.

Pioneer heating accessories

Pioneer/Metro Fires offer a wide range of heating accessories designed to complement your Metro wood fire. The range includes ECO flue systems, floor protectors, wetbacks, heat transfer systems, baffles, bricks and more.

For further details talk to your Metro agency or visit www.metrofires.co.nz

ECO Flue Systems



Flashrites and Versatiles

Wetbacks

High Temperature Paint

Corner and Wall Floor Protectors

Heat Transfer Systems

Universal Door Seal Kits

Fire Cement And Silicone

Glass Tape

Door Seal Rope

Chubb Smoke Detectors

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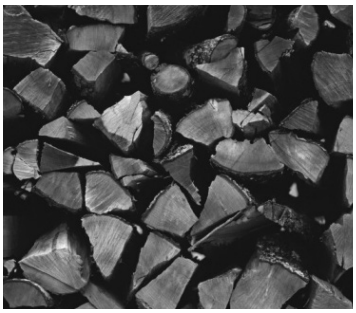
Standard Insert Flue System Installation Sheet



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Standard Insert Flue System

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10/17 © PIONEER MANUFACTURING LTD

NZHHA
New Zealand Home Heating Association Inc.

NEW ZEALAND MADE

PIONEER
MANUFACTURING LIMITED

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⚠ WARNING! Important Information

THIS FLUE KIT HAS BEEN MANUFACTURED IN ACCORDANCE WITH AS/NZS 2918:2001.

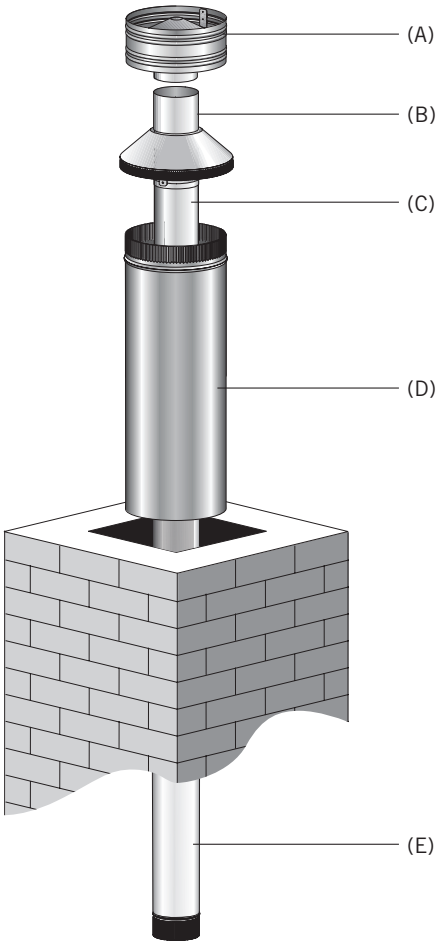
TO ENSURE SAFETY THIS FLUE KIT MUST BE INSTALLED AS OUTLINED IN THESE INSTRUCTIONS. THE APPLIANCE TO WHICH IT IS CONNECTED MUST BE INSTALLED IN ACCORDANCE WITH ITS MANUFACTURERS SPECIFICATIONS AND AS/NZS 2918:2001.

- These installation instructions are for tested appliances only.

⚠ CAUTION! Important Information

- Mixing flue system components from different sources or modifying the dimensional specification of components may result in hazardous conditions. Where such action is considered, the manufacturer should be consulted in the first Instance.
- It is the responsibility of the installer to ensure that the installation of this flue kit complies with AS/NZS 2918:2001, the appliance manufacturers specifications for flue pipe installation and that the relevant building codes are adhered to.
- Bends and extensions to the length of a flue system are permitted (AS/NZS 2918:2001 4.1)

Installing the flue system



SFP Ltd manufacture chimney flashing plates to dimensions or to templates supplied. It is the responsibility of the installer to ensure that the requirements of New Zealand Code Clause E2 (External Moisture) are complied with.

Standard Insert Flue System Components

(A) 1 x Anti down-draught cowl (ADD)

(B) 1 x Combination bracket casing cover

(C) 1 x 600mm length of 150mm diameter stainless steel flue pipe

(D) 1 x 600mm x 250mm diameter galvanised outer casing

(E) 3 x 1200mm length of 150mm diameter stainless steel flue pipe

1) Ensure the chimney is clean and free of soot. Check the chimney for structural soundness.
2) Install wood fire into fireplace according to manufacturers specifications.
3) By looking down chimney, check that heater flue outlet is in line with chimney. If not an offset or bends will be required.
4) Assemble flue pipes together ensuring seams are in line. Joints must be compressed fully and secured with three Monel Steel rivets. Refer to the supplier of the wood fire and use flue pipe sealant if recommended.
5) Lower assembled flue pipe, crimped end down, into wood fire flue spigot. On some installations it may be desirable to assemble flue pipe lengths as they are lowered into the chimney.
6) Secure chimney flashing plate and/or outer casing to chimney with suitable fasteners and weather seal to the chimney top with mortar and/or silicone.
7) Ensure the flue pipe is either flush with or extends above the top of the outer casing by no more than 15mm.
8) Push casing cover (with spigot inside flue pipe) down onto the outer casing. The three locating brackets with holes must be on the outside of the outer casing and are secured using three rivets.
9) Fit cowl but do not secure, as removal for flue cleaning will be necessary. Deform or ovalise the stub of the cowl to ensure it is a tight friction fit.
10) Leave all installation and operating instructions with owner.

4.0 Metre Chimney Flue Kits — Flashing Plate

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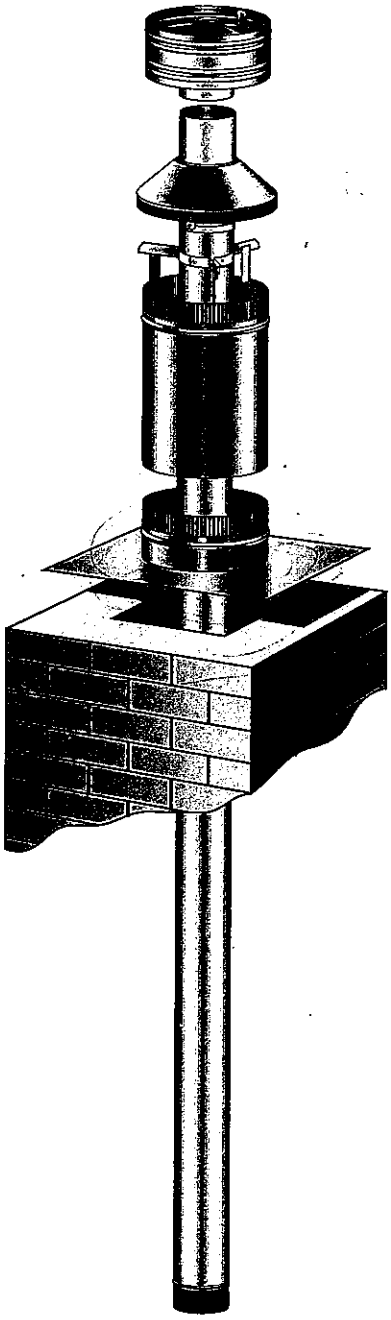
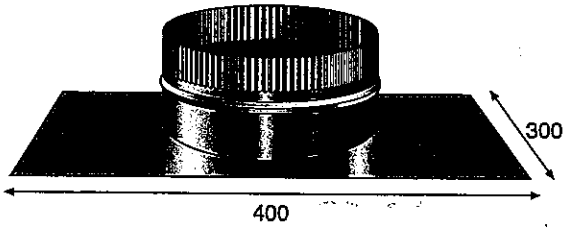


Diagram illustrates 150 Kit Chimney Flashing Plate.



4.0 metre kits meet the Flue Pipe height requirements of AS/NZS 2918:2001 (4.6m rule) for a standard 2.4m stud height and a Wood Burner height of 600mm or greater.

✓