

Inbuilt Gas Fires



OWNER'S MANUAL & INSTALLATION GUIDE

These gas appliances have been tested in accordance with AG 103, NZS 5262 and have been certified by the Australian Gas Association for installation and operation as described in these Installation and Operating Instructions. Your unit should be serviced annually by an authorised service person.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information consult an authorised technician, or your Masport Gas Fire Dealer.

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this appliance. Installation and service must be performed by authorised personnel. Please keep these instructions for further reference.

WHAT DO YOU DO IF YOU SMELL GAS

- Do not try to light any appliance
- Do not touch any electrical switch: do not use any phone in your building
- Immediately close the shut-off valve behind the heater or at the gas meter.
- Call the technician.

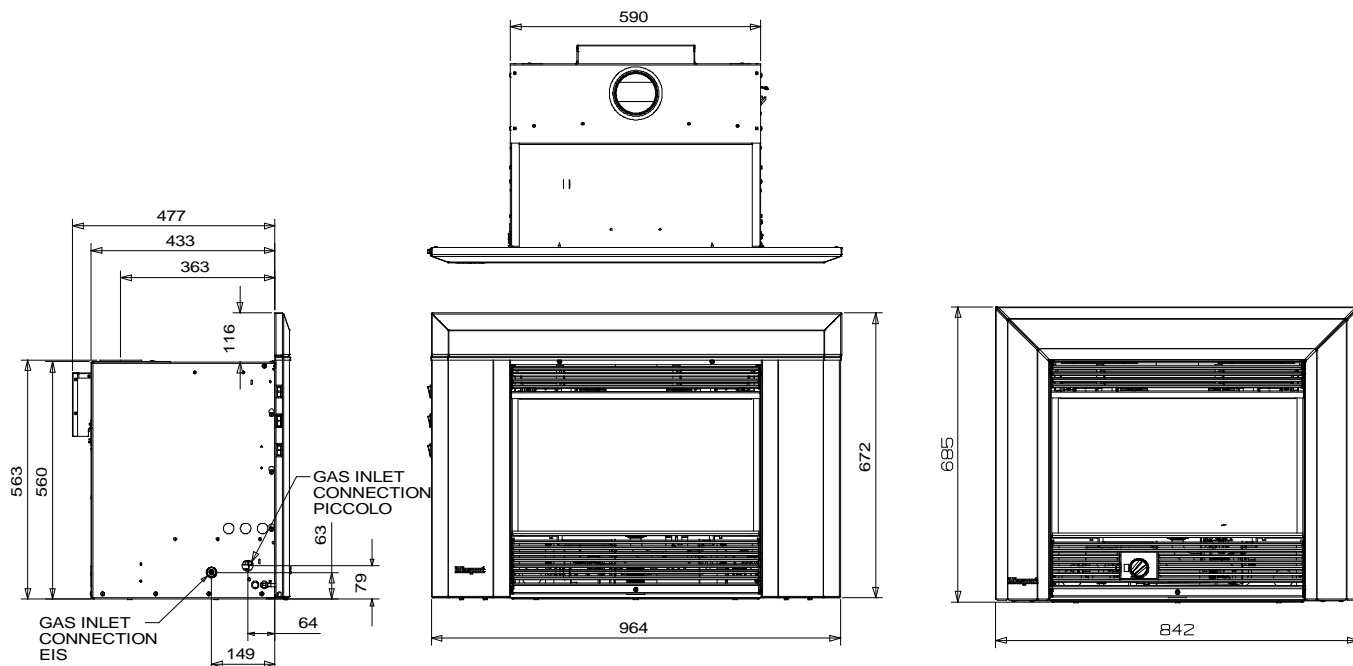
MASPORT INBUILT GAS FIRES

TO THE NEW OWNER

Congratulations! You are the owner of a state-of-the-art Gas Fire by Masport. The Masport Inbuilt Gas Fires have been approved by the Australian Gas Association for both safety and efficiency.

Please take time to acquaint yourself with these instructions and the many features of your Masport Fire.

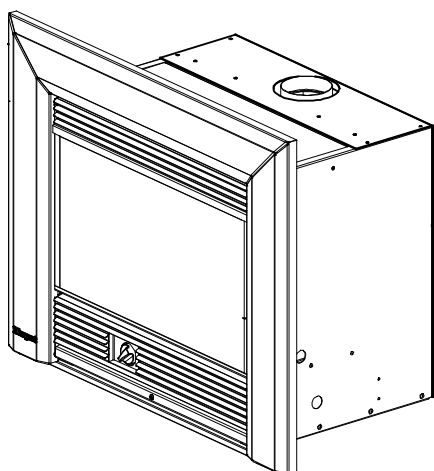
This book contains important information. Please keep it in a safe place for future reference.



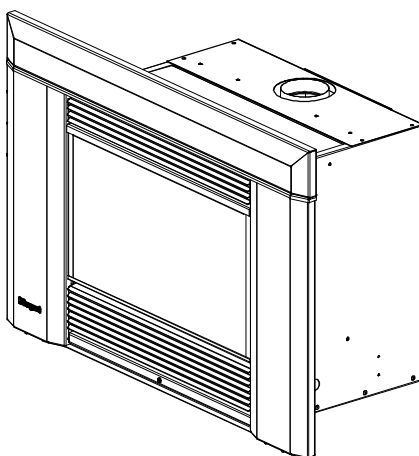
Sofia/Madrid

Piccolo

THE INSTRUCTIONS IN THIS MANUAL APPLY TO; MASPORT INBUILT GAS FIRES- PICCOLO, SOFIA AND MADRID

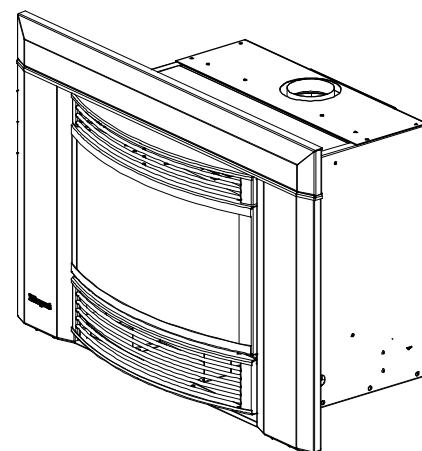


Piccolo



Sofia EIS

EIS = Electronic Ignition System.



Madrid - ECS

ECS = Electronic Control System

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IMPORTANT: SAVE THESE INSTRUCTIONS

Note: *Failure to follow these instructions could cause a malfunction of the heater, which could result in death, serious bodily injury, and/or property damage. Failure to follow these instructions may also void your fire insurance and/or warranty.*

WARNING.

Installation

These heaters may be installed in an existing masonry chimney, or in a fabricated timber construction using the 'zero clearance' accessory kit and special flue system. All installations *must* be carried out by an Authorised Installer who, on completion of the installation, must issue a certificate of compliance in accordance with national and/or local codes. If a certificate of compliance is not issued then the Masport warranty may be void.

The heater must be installed according to these instructions and in compliance with all relevant building, gas-fitting, electrical and other Statutory Regulations (e.g. AS 5601 (AG-601), NZS 5261). Any shortcomings in the appliance and flue installation will be the responsibility of the installer, and Masport Ltd will not be accountable for any such failings or their consequences.

These appliances must not be installed in mobile homes.

YOUR HEATER MUST BE SERVICED YEARLY BY AN AUTHORISED TECHNICIAN.

BEFORE INSTALLATION COMMENCES, check the data plate to verify that it is the correct type to suit your gas and also that the gas consumption rate is correct for your application.

IF THE APPLIANCE REQUIRES CONVERSION TO SUIT YOUR GAS, THIS MUST BE CARRIED OUT ONLY BY AN AUTHORISED TECHNICIAN WHO HAS THE APPROPRIATE GAS PRESSURE MEASURING EQUIPMENT.

Warranty Repair & Annual Servicing

Warranty repair work *must* be carried out by a recognised Masport gas fire Technician.

The appliance must be checked and serviced yearly by an Authorised Technician. For contact details of authorised Masport Technicians in your locality, please contact the retailer from whom the appliance was purchased.

FOR YOUR SAFETY

This appliance requires air for proper combustion. Always provide adequate combustion and ventilation air.

The guard is fitted to this appliance (Australia only) to reduce the risk of fire or injury from burns and no part of it should be permanently removed. For the protection of young children or the infirm, a secondary guard is required.

Do not place articles on or against this appliance. Do not use or store flammable materials near this appliance.

Do not spray aerosols in the vicinity of this appliance while it is in operation.

SPECIFICATIONS

Gas Consumption: 35MJ/h

Fuel: Natural Gas or LPG

Electrical: 230-250 volts AC system

Fan: 2 speed

Logs: Ceramic fibre, 6 per set

Before installation commences, check the data plate to verify that it is the correct gas type and that the gas consumption rate is correct for your application.

IMPORTANT REQUIREMENTS

- 1) The appliance installation must conform with local codes or in the absence of local codes, to AG601, NZS5261.
- 2) The appliance must be inspected before use and at least annually by an authorised Technician. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance are kept clean and free from excessive lint.
- 3) This appliance may be installed in a vented, non-combustible fireplace or in a timber structure when fitted into the special 'zero clearance' cabinet and fitted with a special flue system. If the flue, in either case, passes through an area where people might come into contact with it, it must be suitably guarded.
- 4) Always connect this appliance to a flue pipe terminating outside the building. Never vent to another room. Make sure that the flue pipe is of adequate height to provide the proper draft. Use only the Masport approved flue kit.

- 5) Inspect the flue system annually for blockage and any signs of deterioration.
- 6) If the glass is removed for servicing it must be replaced before operating the appliance.
- 7) To prevent injury, do not allow anyone who is unfamiliar with the heater to operate it.
- 8) Always turn off the gas valve before dismantling for cleaning. For relighting, refer to lighting instructions. Keep the burner and control compartment clean by brushing and vacuuming at least once a year.
- 9) When cleaning the logs, use a soft clean paintbrush as they are fragile and easily damaged.
- 10) Clean the appliance with a damp cloth (never when unit is hot). Never use an abrasive cleaner. The glass should be cleaned with a gas fireplace glass cleaner.
- 11) Check the flames of the burner periodically, making sure they are not lifting or floating. If there is a problem call an authorised Technician.

ELECTRICAL REQUIREMENTS

Piccolo

No mains voltage electric power supply is required for the gas control to operate, but a 240-Volt AC supply is required for the fan. Plug the 3-pin plug into a suitable receptacle. Do not cut the earth terminal off under any circumstances.

Sofia & Madrid

Mains voltage electric power supply is required for the gas control to operate on these models. A 240-Volt AC power cord is connected to the control system. Plug the 3-pin plug into a suitable receptacle. Do not cut the earth terminal off under any circumstances.

When connected with 240 volts, all appliances must be electrically earthed in accordance with local codes.

INSTALLATION REQUIREMENTS FOR MASONRY FIREPLACES

SEE PAGE 10 FOR ZERO CLEARANCE INSTALLATIONS IN TIMBER STRUCTURES

For safe installation the following matters must be attended to;

- The fireplace and chimney must be thoroughly cleaned and checked for soundness.
- The chimney must not connect to a solid fuel burning fireplace.

- The fireplace recess must have a non-metallic heat resistant surround (e.g. masonry) extending at least 520mm each side of the recess centreline and up at least to the mantel above the fireplace recess.
- A flue pipe or flexiliner must be fitted right up the chimney to exit at the top and it must be terminated with an approved gas cowl.

INSTALLATION SEQUENCE

The Masport Gas Fires are installed in the steps as listed below. Detailed instructions follow.

- 1) Check the clearances to ensure that the fire will fit the fireplace recess and that the required minimum clearances to combustibles will be maintained. (See page 6) Also check ventilation requirements.
- 2) Prepare the fireplace recess. The base of the fireplace **must** be levelled, by for example grouting, to prevent vibration from possible fan imbalance. The base of the gasfire must be sitting on this flat surface.
- 3) Remove the fascia assembly from the firebox cabinet.
- 4) Install the flue or flexi-liner in accordance with AG 601 or NZS 5261, refer to instructions provided with the Masport flue kit.
- 5) Install the gasfire into the fireplace recess and connect to the flue system. See page 7.
- 6) Make the gas connection (see page 7) and the electrical connection.
- 7) Re- install the fascia and switches (if any).
- 8) Remove the glass or window assembly and install the logs and embers. See pages 8 & 9.
- 9) Re-install the glass or window assembly. See pages 8 & 9.
- 10) Install louvres or grilles.
- 11) **Final check:** Before leaving, the installer must ensure that the appliance is operating correctly. This includes:
 - a) Checking the injector pressure. See page 9.
 - b) Adjusting the primary air, if required, to ensure that the flame does not deposit carbon on the components.
 - c) Ensuring that the flue is drawing correctly.
 - d) Instructing the customer in the correct operation of the appliance.
 - e) Leaving these instructions with the customer.
 - f) Issuing a certificate of compliance.

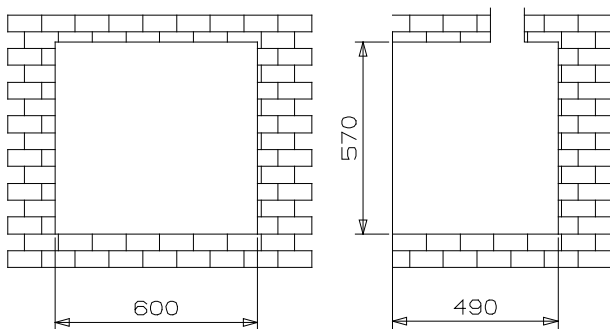
CLEARANCES

All Masport heaters are tested to New Zealand and Australian standards. Clearances are for fire hazard only. Wall surfaces directly above the heater may reach 85 degrees C, so materials such as wallpaper and water-based paints may be adversely affected. For durability of finishes and surfaces you should contact the relevant manufacturer for their specification. Masport accepts no responsibility for the deterioration of surfaces or finishes.

MASONRY FIREPLACES

The minimum masonry fireplace recess for Masport Inbuilt Gasfires is shown in the following diagram.

The fireplace recess must have a non-metallic heat resistant surround (e.g. masonry) extending at least 520mm each side of the recess centerline and up at least to the mantel above the fireplace recess.



Measure the fireplace recess and remove bricks as necessary to accept the firebox outer case. Clear away any loose rubble and inspect before installing the fireplace.

The base of the fireplace must be levelled, by for example grouting, to prevent vibration from possible fan imbalance.

For shallow fireplace recesses an optional deep fascia is available which reduces the 490mm requirement to 390mm.

NON MASONRY FIREPLACE INSTALLATIONS (Zero Clearance)

A Zero Clearance Kit is available which allows installation when no masonry fireplace is available. See page 10

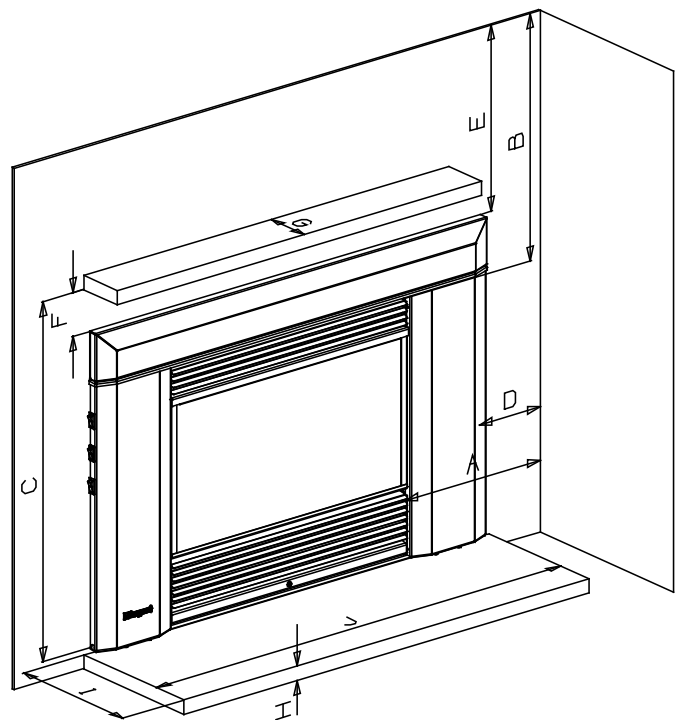
Minimum Clearances to Combustibles for Masonry Fireplace Installations (mm)

See Page 10 for Zero Clearance Installations

Fascia Type;	EIS/ECS (Shown)	Piccolo
(From Unit)		
Sides A	225	225
Ceiling B	1400	1400
Mantel C	1000	1000
(From Fascia)		
	(672 x 964)	(685 x 842)
Sides D	37	99
Ceiling E	1288	1275
Mantel F	328	315

The following are for both Fascia options;

Maximum Mantel Depth	G	305
Minimum Hearth Height	H	0
Minimum Hearth Depth	I	300
Minimum Hearth Width	J	965



NOTE: Mantel clearances and hearth(floor protector) requirements for Installation listed here are for masonry recess installation.

FLUE SYSTEM

THE APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY SERVING A SEPARATE SOLID FUEL BURNING APPLIANCE

This appliance is designed to attach to a 100mm diameter type B-Vent or approved flexi-liner or listed gas fuel type flue liner running the full length of the chimney. A minimum flue height of 3.6m is recommended and it may be necessary to extend beyond this. B-Vent flue must be supported by a flue support - supplied by flue manufacturer. The Masport Insert incorporates its own internal draft hood, so no additional external draft hood is required.

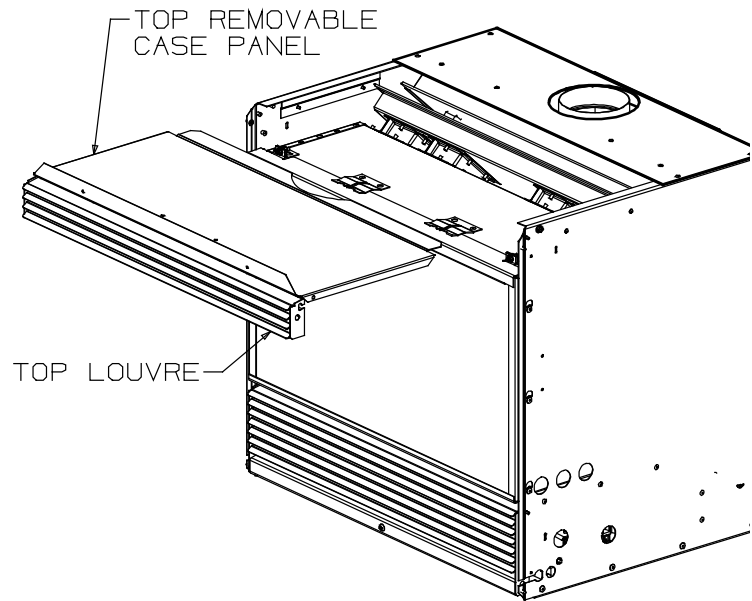
Periodically check that the flue is unrestricted and an adequate draft is present when the unit is in operation.

Install to AG 601, NZS 5261 or local codes.

FIREBOX CASE INSTALLATION

- 1) Remove the fascia, top and bottom louvres or grilles. Louvres or grilles swing out at the bottom and then lift up. The bottom one has a centre retaining screw, which must be turned 90° anticlockwise first. (When refitting, simply press the screw in to secure the louvre or grille).
- 2) Slide the fireplace into the recess and adjust the case position so that it is level and its front top flange is in line with the face of the fireplace surround. Where seismic restraint is necessary, screw the bottom of the case to the base of the fireplace recess. The base of the fireplace must be levelled (by, for example, grouting) to prevent vibration from possible fan imbalance.
- 3) If space above the case for positioning and fixing the flue is limited, greater access can be provided by first removing the top louvre or grille (by lifting it upwards and outwards).
- 4) Then remove the two screws holding the top sliding panel, one is located at each side of the fire. The top front section of the case can now slide out as illustrated to increase access.
- 5) Attach the flue to the flue spigot. The flue spigot of the appliance will fit inside a standard flue and may be fastened directly to the flue by sheet metal screw or a B-Vent, single wall flue connector (not available from Masport).
- 6) Once the flue is connected, reassemble the firebox cabinet by sliding in the top panel.

Note: *The gas connection should be made after the unit is in place to avoid damage to line when pushing the heater into position.*



COMBUSTION AND VENTILATION AIR

WARNING: This appliance needs fresh air for safe operation and must be installed with provision for an adequate supply of combustion and ventilation air to the room in which it is operating.

Air for combustion is drawn in through the front of the unit; therefore, this area must be kept clear of any obstructions.

GAS CONNECTION

GAS CONNECTION WARNING:

Installation *must* be carried out by a registered installer who, on completion of the installation, must issue a certificate of compliance, in accordance with national and/or local codes. If a certificate of compliance is not issued then the Masport warranty may be void.

The gas connections are a 3/8" flare for New Zealand & 1/2" flare for Australia.

When connecting the gas, ensure that the control valve or pressure regulator is not twisted during this procedure (such damage is not covered by Masport warranty).

GAS PIPE TESTING

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve (not supplied with heater) during any pressure testing of the gas supply piping system at test pressures equal to or greater than 6 kPa.

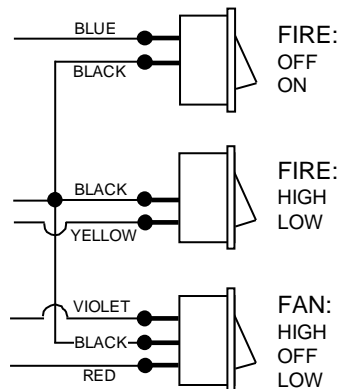
FASCIA INSTALLATION

Piccolo Fascia

- 1) The power cord should be run behind the fascia panel and out through the slot in the bottom of the fascia. The rubber grommet on the power cord should be inserted into the slot to protect the mains lead against possible damage. Insert the fan switch (if has not already been inserted) in the rectangular hole in the left side of the left fascia panel. Connect the fan wires in the following positions. (See Piccolo wiring diagram Page 20.)
Brown wire to central terminal,
Red wire to top terminal,
Orange wire to bottom terminal.
- 2) Attach the assembled fascia to the case using six screws.

Sofia EIS Fascia

- 1) There are three switches supplied with the fascia. If they have not already been assembled, insert them in the rectangular holes in the left side of the left fascia panel. The FAN switch (three terminals) goes in the bottom hole either way up. The burner HI/LO switch (two terminals with no printing on the rocker) goes in the centre hole with the two terminals at the bottom. The ON/OFF switch (two terminals) fits in the top hole with the terminals at the top. (See drawing).
- 2) Connect the fan wires, red, violet and black, to the bottom fan switch, in the following positions. (See drawing).
 - Black wire to centre terminal,
 - Red wire to bottom terminal,
 - Violet wire to top terminal.
- 3) Connect the burner HI/LO wires, yellow and black, to the centre switch in the following positions. (See drawing).
 - Black wire to top/centre terminal,
 - Yellow wire to bottom terminal.
- 4) Connect the burner ON/OFF wires, blue and black, to the top switch in the following positions. (See drawing).
 - Blue wire to upper terminal,
 - Black wire to lower terminal
- 5) Ensure that the wires are away from the side of the fireplace. The power cord should be run behind the fascia panel and out through the slot in the side of the fascia. The rubber grommet on the power cord should be inserted into the slot to protect the mains lead against possible damage.



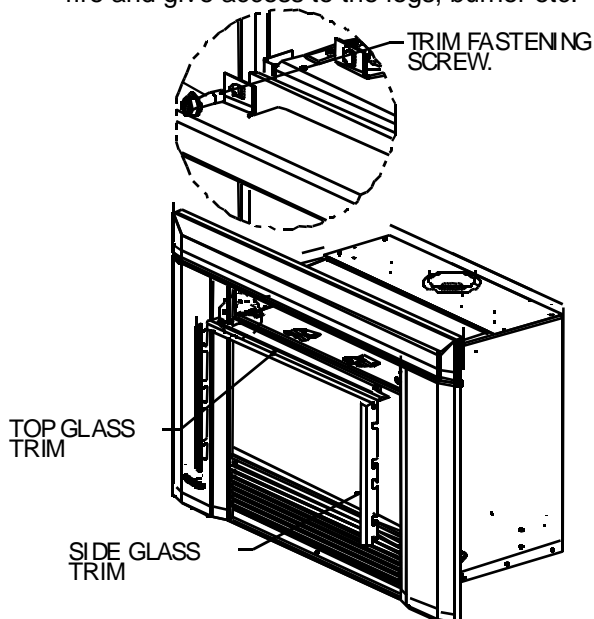
- 6) Offer the fascia assembly up to the case and connect the green earth wire to the tab on the control valve. Then secure the fascia through the two holes on the inner edges of each fascia side panel and the two holes under the top rail, using the self tapping screws provided.

Madrid ECS Fascia

- 1) Offer the fascia assembly up to the case and then secure the fascia through the two holes on the inner edges of each fascia side panel and the two holes under the top rail, using the self tapping screws provided

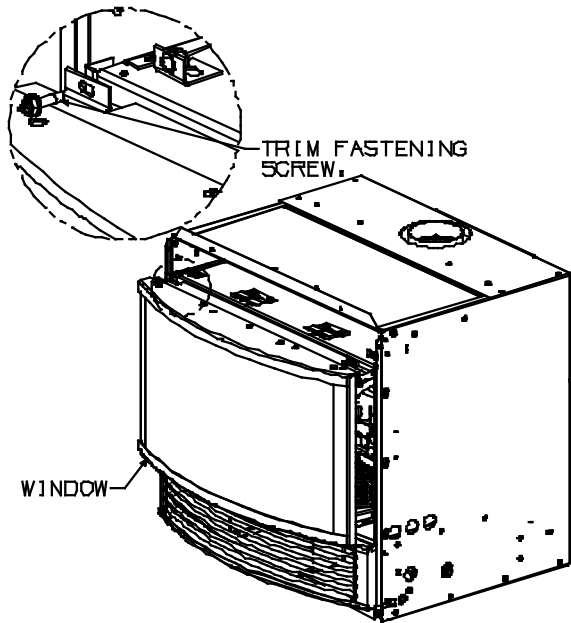
FLUSH FRONT GLASS REMOVAL

- 1) Remove the top louvre by lifting it upwards and outwards to clear the retaining pins.
- 2) Remove the two trim fastening screws, one at each end of the top trim as per the diagram below and remove the top glass trim.
- 3) Remove the two black cover trims one at each side of the glass by lifting them upwards and then out. Refer to the diagram. Pull the top of the trim forward before the bottom.
- 4) This will now free the glass for removal from the fire and give access to the logs, burner etc.



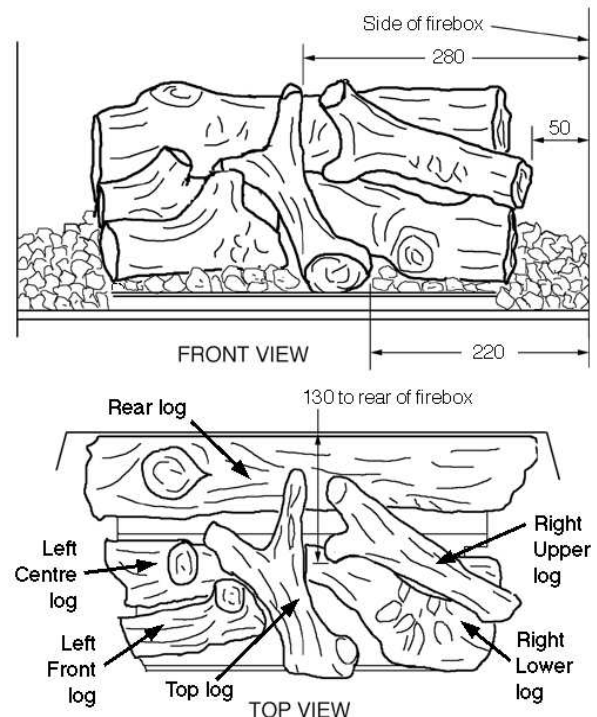
BAY FRONT REMOVAL

- 1) Remove the top grille by lifting it upwards and outwards to clear the retaining pins.
- 2) Release the bottom grille retaining screw by turning it one quarter turn anti-clockwise. Remove the bottom grille by moving it out at the bottom and lifting it up off the retaining pins.
- 3) Remove the two window fastening screws, one at each end of the top of the window.
- 4) The bay window can now be lifted clear by pulling the top edge slightly outwards.



Place the right Upper log on top of the hollow in the right Lower log as illustrated, maintaining the 130 dimension shown to the rear of the firebox. Place the Top log, positioned as shown with its butt end sitting against the raised front lip of the burner. Verify the correct distances to the right side of the firebox.

LOG POSITIONS



- 4) Spread embers between and under the logs no further than 50 mm back from front lip of burner and also on the floor of the firebox at each side of the burner. **Do NOT block the ventilation slots in the burner.** Embers can be placed down the sides to hide the black steelwork etc.

LOG & EMBER PLACEMENT

- 1) Once either the flush or bay windows are removed as per the above instructions the embers can be placed in the fire.
- 2) Inspect the logs before ember installation. If the logs are broken, do not use the fire until they are replaced. Broken logs can interfere with the pilot operation, combustion, etc.
- 3) LOG IDENTIFICATION
 - 790338 - Rear log, mounting centres - 340 mm
 - 990339 - Left Centre log, mtg. centres - 115 mm
 - 790356 - Left Front log, mtg. centres - 93 mm
 - 790341 - Right Lower log, mtg. centres - 122 mm
 - 790342 - Right Upper log, length - 245 mm
 - 790343 - Centre log, length - 255 mm

Fit the first four logs on their mounting posts on the gas burner in the following order:-

1. The Rear log
2. The Left Centre log
3. The Left Front log
4. The Right Lower log

- 5) Re-install the flush or bay window. Do not operate the appliance with the window removed.

GAS PRESSURE TEST

The unit is preset to give the correct gas input at the specified injector pressures shown on the label. The maximum injector pressure is:

Gas Type	Piccolo		EIS/ECS	
	Low	High	Low	High
Natural Gas	0.30kPa	0.75kPa	0.35kPa	0.82kPa
Propane	0.90kPa	2.10kPa	1.00kPa	2.30kPa

The injector pressure is controlled by a regulator built into the gas valve on EIS and ECS models. The Piccolo has a pressure regulator separate from the valve. In **all** cases, when adjusting the pressure, check it at the outlet pressure test point **on the valve**. The pressure check should be carried out with the unit burning and the correct pressures are shown above.

ZERO CLEARANCE INSTALLATION

SEE PAGE 5 FOR INSTALLATIONS IN
MASONRY FIREPLACE

REQUIREMENTS FOR INSTALLING IN TIMBER STRUCTURES

Piccolo, Sofia and Madrid heaters can be installed in timber structures provided that the correct shielding cabinet is used. **The fascia requires modifications also, and a special flue system is required.** Because the fascia lifts the heater up from floor level, no floor protector (hearth) is needed. Conversion kits appropriate to the model are available from Masport.

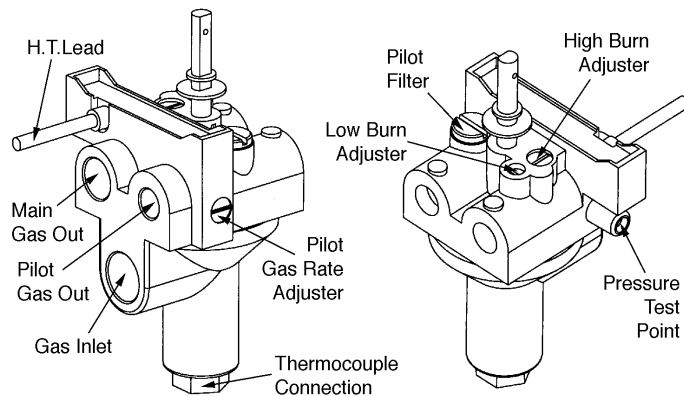
WARNING: The stand-off angles on the sides and rear of the outer cabinet are fitted to ensure a safe clearance to combustible materials. The angles must not be removed. No combustible framing material must be less than 35mm above the top of the outer cabinet.

All Masport heaters are tested to NZ and Aust. Standards. Clearances are for fire hazard only. Wall surfaces directly above the heater may reach 85 degrees C, so materials such as wallpaper and water based paint may be adversely affected. For durability of finishes and surfaces, contact the relevant manufacturer. Masport accepts no responsibility for the deterioration of surfaces or finishes.

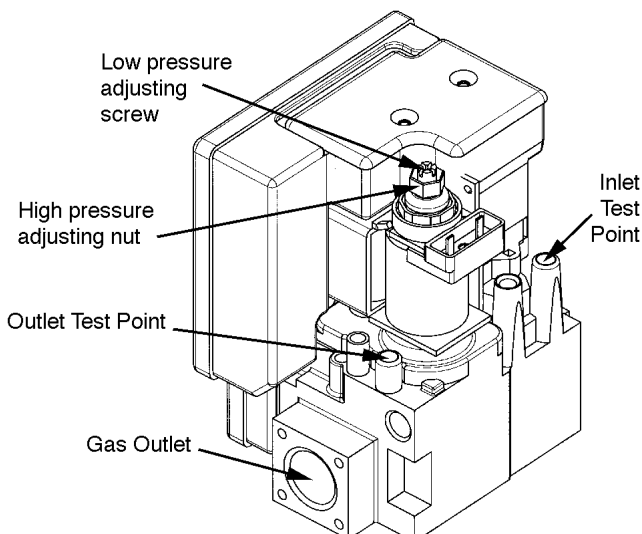
PROCEDURE FOR IN-ROOM INSTALLATIONS

1. Inspect the house construction to verify that the 150 mm diameter flue shield can pass right up through the ceiling space without requiring the removal of essential support beams. The flue centreline will be 363mm back from the finished front face of the enclosure. With the heater parallel to the wall, and the enclosure built to its minimum allowable depth, the flue centreline will be 217mm from the wall. With the heater parallel to the wall, any heat sensitive side wall must be at least 520mm from the heater centreline. If the enclosure is to be at 45° in the corner of the room, and is built to its minimum allowable depth, the face of the enclosure will be 935mm out from the corner and the flue centreline will be 600mm out from the corner.
2. Drop a plumb line from the ceiling to the floor to establish a flue centreline as detailed above, and cut and nog a hole at least 200mm square through the ceiling on this centreline. The ceiling inside the enclosure may be removed entirely, if desired, and it must be removed if it will be less than 1600mm. above the top of the outer steel cabinet. See step 10.
3. Frame up the enclosure as shown in Fig. 1. The frame should provide a recess 710mm wide and at least 580mm deep (measured from the face of the cladding material or from any tiles etc. that may be fixed to the cladding material). The overall width of the frame must be not less than 1040mm to accommodate the fascia width and to ensure a safe

VALVE DETAILS



Piccolo



EIS and ECS Models

OPTIONAL REMOTE CONTROL INSTALLATION (EIS Models Only)

Use the Optional Masport Remote Control Kit (the Climate Pilot) approved for this unit. Use of other systems may void your warranty.

The remote control kit comes with a hand held transmitter, and a receiver.

- 1) Choose a convenient location to install the receiver (protection from extreme heat is very important). Run wires from the appliance to that location.
- 2) Connect the two wires to the terminals at the front of the control box (behind the bottom louvre or grille) in place of the jumper wire already installed there. (Refer to instructions supplied with the remote control for detailed installation instructions)

Remote Control Thermostat (RF)
Masport Part Number 791397

clearance to any combustible material should there be a room side-wall abutting the enclosure. The opening must have two timber uprights spaced 710mm (between) at the front. The bearer rails on the base of the outer steel cabinet will sit directly on the floor. No insulation is needed on top of the floor in the recess. (See Fig. 1).

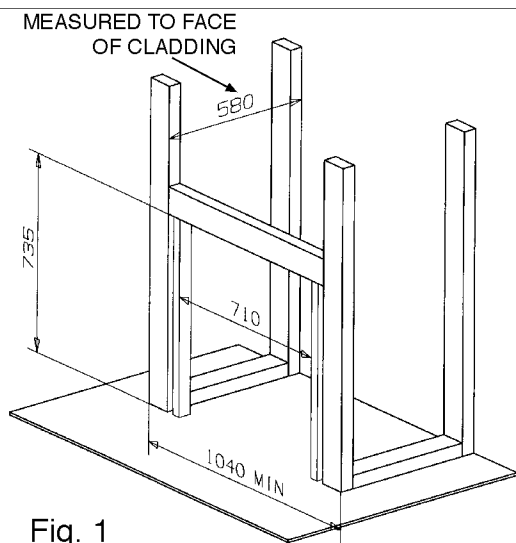


Fig. 1

Note: Increase the 735 dim. for elevated installations

4. The floor in front of the heater will not require a hearth or any other heat protection, although a hearth (floor protector) may be provided, if desired, purely for aesthetic reasons.
5. The usual three nogs may be fixed at each side of the enclosure. At the front the lowest nog must have its lower face 735mm above the floor. Further nogs can be fitted anywhere above this one.
6. Fix the cladding to the sides and front of the framed-up enclosure. Conventional paper-faced wall cladding will be satisfactory on all faces of the enclosure, although a more appropriate material (such as Tile and Slate underlay) may be preferable where tiles etc. are to be fitted.
7. If a decorative finish (such as tiles or slate) is to be applied to the face of the enclosure, this should be done next. The decorative finish must extend down to the top of the recess, but may stop short of the sides of the recess provided that packing is fitted between the uprights of the enclosure and the flanges of the outer steel cabinet to bring the flanges in line with the outer surface of the decorative finish.
8. If a mantelshelf is being fitted, it must extend no more than 200 mm, and its undersurface must be at least 1060mm above the floor or at least 305mm above the top of the fascia if the base of the heater is raised above floor level. Please note that the mantelshelf details for masonry fireplace installations are NOT valid for zero clearance installations.

9. Penetrate the roofing material on the flue centreline, following the instructions accompanying the special Zero Clearance Flue Kit.
10. **IMPORTANT.** Cover the entire open space surrounding the flue heat shield (at ceiling level) with wire netting with a mesh small enough to prevent the entry of birds or vermin. This will avoid the risk of a fire from nesting inside the enclosure.

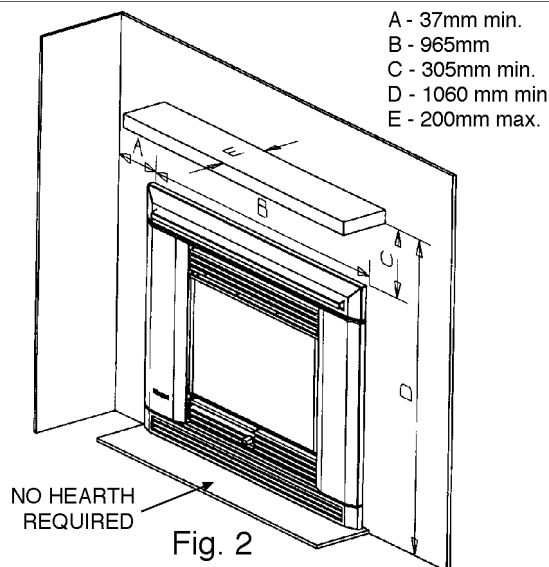


Fig. 2

Note: Increase the D dim. for elevated installations

11. Assemble the two sides, the base, the back and the top of the outer steel cabinet. Fix the two heat deflectors under the top of the outer cabinet with their flanges up, thus forming a channel with the front flange of the cabinet top. (See Fig. 3 and 4).

When assembling the sides to the base, fit a bearer rail at each side to raise the base of the outer cabinet 25mm above floor level. Slide the cabinet into the constructed recess. Check that it is centred between the front studs and that the cabinet is 'squared up'. Secure the outer cabinet to the front studs through the six holes in the front flanges of the outer cabinet.

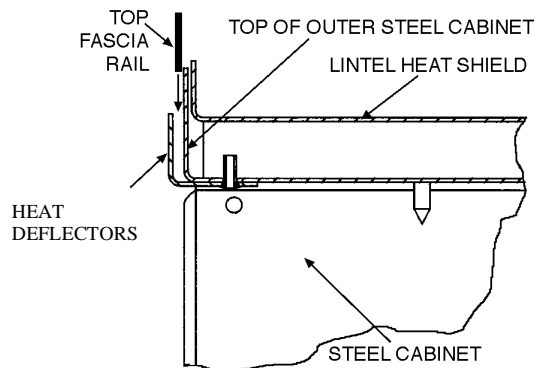
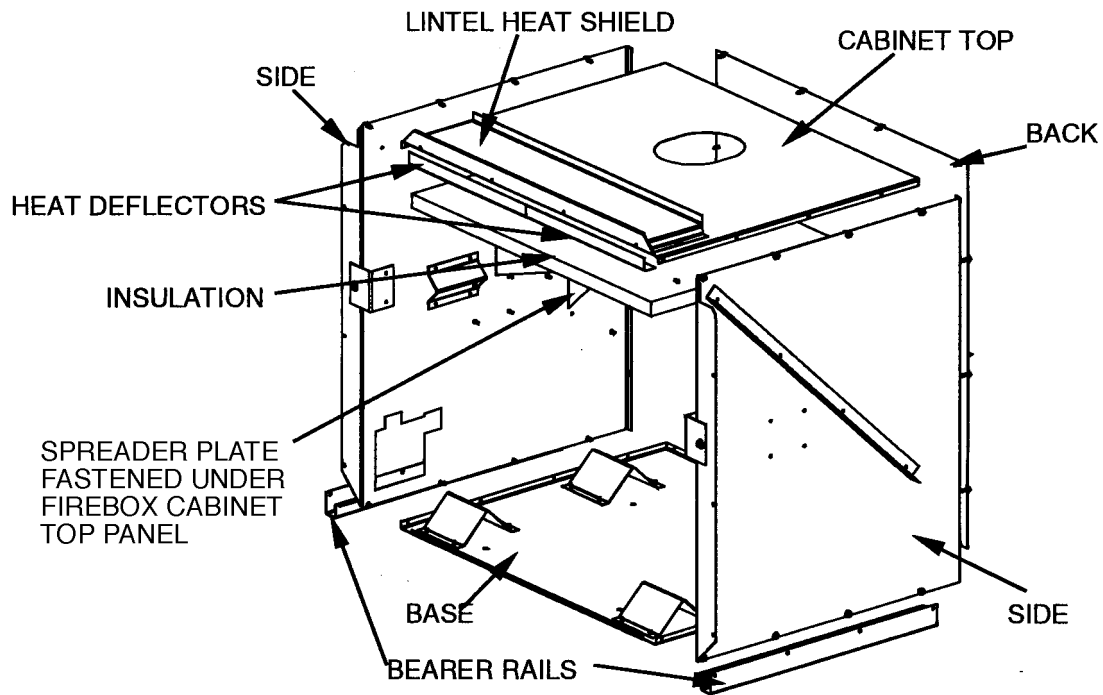


Fig. 3



OUTER STEEL CABINET Fig. 4

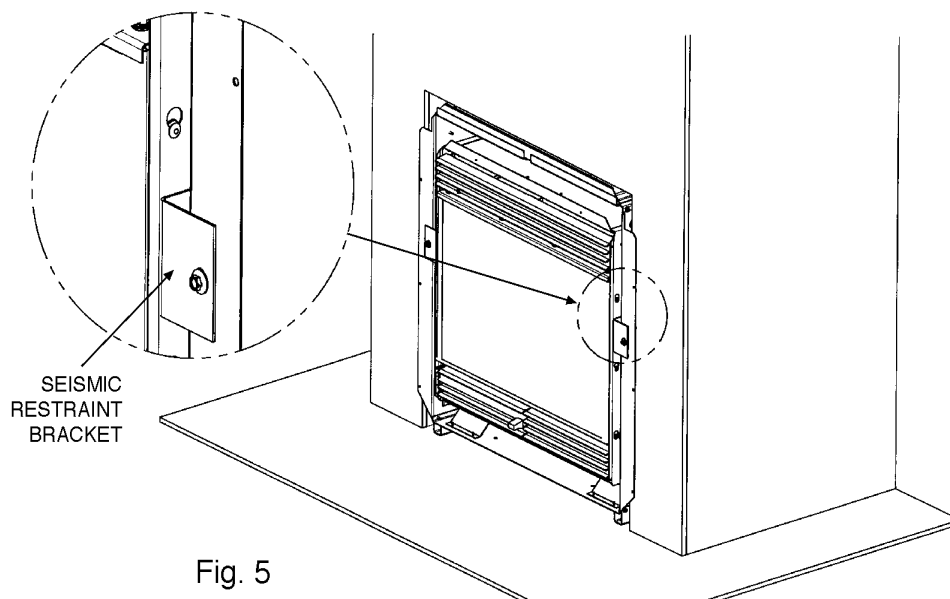
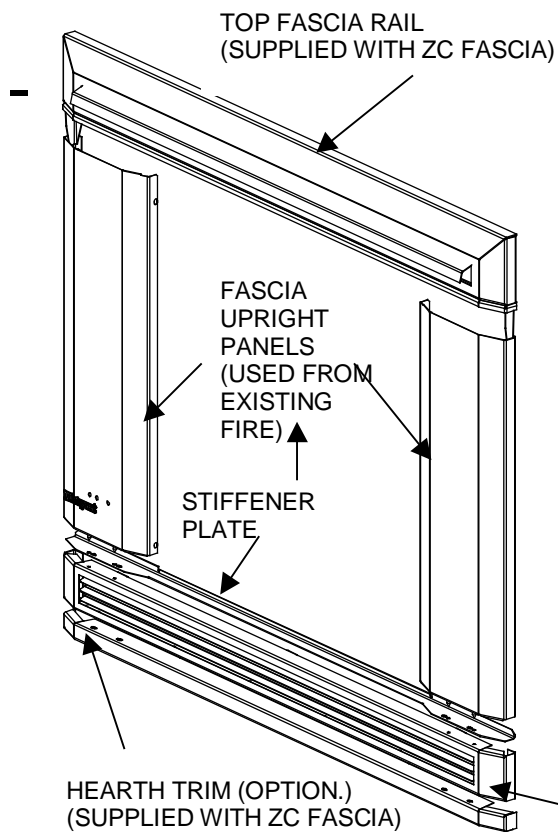


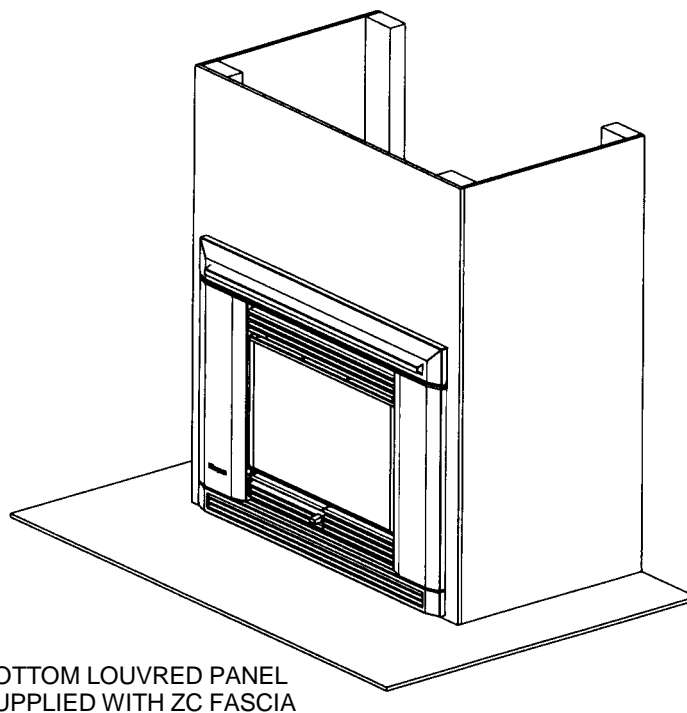
Fig. 5

12. Assemble sufficient lengths of flue heat shield (150 mm dia.) so that the flue will extend the necessary height above the roof line. (See flue instructions).
13. Lower the flue shield down through the roof aperture until it is resting on top of the outer steel case. Check from below that it is centralised on the hole in the cabinet and flash the shield at roof level.
14. Fasten a seismic restraint bracket on each side of the firebox cabinet.
15. Slide the firebox cabinet into the outer cabinet and secure the seismic restraint brackets to the cabinet flanges.
16. Make the gas connection as detailed on Page 7.
17. Fold the flow spreader plate along the line of the slots, with the two mounting lugs facing toward each other until the distance between the mounting holes is 116mm.
18. Slide out the top front section of the **firebox** cabinet (not the ZC cabinet). Attach the V-shaped spreader plate **under** this component, making sure that the point of the 'V' will be toward the flue.
19. Place the 200mm square plate (with the 108mm diameter hole) over the flue spigot on top of the firebox cabinet (not the outer cabinet).

20. Assemble the appropriate number of flue lengths and fix flue shield spacers as required. (See the flue instructions).
21. Lower the assembled flue down through the heat shield in the usual manner and ensure that it engages with the flue socket of the heater. Fit the flue cowl.
22. Slide in the top front panel of the firebox cabinet and secure it at each side with a screw.
23. Install the insulating blanket on top of the firebox cabinet (not the outer cabinet).
24. Assemble the bottom louvred panel of the fascia to the fascia upright panels, sandwiching the stiffener plate between them as shown in Fig. 6, using four screws. Piccolo zero clearance fascias have new upright panels, while the other models use the same upright panels as fires installed in masonry enclosures. All fascias use a new top panel.
25. Offer this assembly into approximately its final position and attach the wiring looms as detailed on Page 8.
26. Fit the fascia, using two screws each side, into the firebox cabinet.
27. Lower the top fascia rail prongs into the fascia uprights, ensuring the assembly is firmly in position and **confirming that the top rail engages in the channel** (formed in step 11) at the top front of the outer cabinet. (See fig. 3)
28. Fit two screws through the bottom of the top fascia rail into the front upstand of the firebox cabinet.
29. Remove the glass and install the embers. See pages 8 & 9. Re-fit the glass.
30. Carry out the usual test firing procedure.



FASCIA ASSEMBLY Fig. 6



FINISHED INSTALLATION Fig. 7

PROCEDURE FOR EXTERNAL INSTALLATIONS

If the enclosure for the ZC cabinet is to be erected outside the house, the shielding and flue installation details above will still apply. Suitable foundations will be required to support the weight of the enclosure and the heater, and weatherproofing for the entire assembly will be necessary.

As before, the opening in the wall for the appliance must be 710mm wide and 735mm high, with its bottom edge level with the floor of the room. The minimum clearances to nearby side walls and the mantles shelf clearances detailed in Fig. 2 must be complied with.

OPERATING INSTRUCTIONS

Before operating this appliance, proceed through the following checklist.

- 1) Read and understand these instructions before **operating** this appliance.
- 2) Check to see that all wiring is correct and enclosed to prevent possible shock.
- 3) Check to ensure there are no gas leaks.
- 4) Never operate the appliance with the glass removed.
- 5) Verify that the flue and the flue cap are unobstructed.
- 6) Verify log placement. If the pilot or ignition electrodes cannot be seen when lighting the unit - the logs or the embers have been incorrectly positioned.
- 7) The heater should never be turned off and on again without a minimum of a 60-second wait.
- 8) Each time the appliance is lit, condensation will fog the glass. This condensation is normal and will disappear in a few minutes as the glass heats up.

DO NOT USE THE HEATER WITH THE GLASS ASSEMBLY REMOVED.

OPERATING PROCEDURE

PICCOLO - LIGHTING

IMPORTANT: The gas control knob cannot be turned from "PILOT" to "OFF" unless it is partially depressed.

- 1) If the control knob is in the "OFF" position proceed to Step 4.
- 2) Push in gas control knob and turn clockwise to "OFF". Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in. Do not force.
- 3) Wait five minutes to allow gas that may have accumulated in the main burner compartment, to escape. If you do smell gas, follow the instructions on the front of this manual. If you don't smell gas continue on to the next step.
- 4) Push in and turn the gas control counter clockwise to "IGN".
- 5) The piezo igniter will click as a spark jumps across the terminals at the pilot. It may be necessary to repeat this several times before the pilot ignites if there is air in the pilot light pipeline. The pilot is located at the right, inside the firebox behind the front log. When the pilot lights, continue to hold the control knob in for approximately 15 seconds, then release it. The pilot flame should continue to burn. If the pilot does not remain lit, repeat this operation, allowing a longer period before releasing the gas control knob.
- 6) With the pilot flame established, turn the gas control knob fully anticlockwise to ignite the burner. The flame height can then be adjusted as required by turning the knob clockwise.

PICCOLO - FAN

The fan operates by using the rocker switch on the left-hand side of the fascia. To adjust the desired fan speed, operate the rocker switch. The fan has 2 speeds, a high speed for more rapid air movement and a low speed. The fan should not be used until the fire is up to operating temperature, approximately 10mins. The fan can be left running after the fire has been shut down until it is circulating no more useful heat.

PICCOLO- SHUT DOWN

- 1) Push the knob in momentarily and rotate clockwise to the pilot position. To extinguish the pilot, push the knob in and turn clockwise to the "OFF" position. Do not force.
- 2) Disconnect all electric power and gas to the appliance if service is to be performed.

EIS MODELS-LIGHTING

Ensure that the gas supply valve is ON and the mains power is switched ON.

- 1) Turn on the top switch at the left side of the fascia.
- 2) Provided that there is a jumper wire across the thermostat terminals on the control box (inside the lower grille), or that the thermostat (if connected) is calling for heat, there will be a continuous spark at the igniter terminals after about five seconds.
- 3) If the spark does not appear, switch OFF the top switch (to re-set the ignition module), and switch it ON again.
- 4) If the spark appears but there is no gas available, the spark will cease after about ten seconds, bringing the ignition sequence to a halt. Recommence the sequence by switching OFF and ON once again.
- 5) Repeat as necessary until air is cleared from the pipeline and the burner lights. When this happens, the spark will automatically cease.
- 6) The flame height can be controlled with the middle rocker switch on the LH side of the fascia. Note that flame size only changes between high and low.
- 7) While the fan speed can be pre-selected at this time, using the lower rocker switch, the fan will not start until the firebox has reached a reasonable working temperature. The fan will start automatically once this has been attained. (Usually about 10 minutes, on full flame height).

EIS – FAN

The fan operates by using the bottom of the 3 rocker switches on the left-hand side of the fascia. To select the desired fan speed, operate the rocker switch. The fan has 2 speeds, a high speed for more rapid air movement and a low speed.

EIS models are fitted with a thermodisc fan control. This means the fan will operate only when the heater is up to operating temperature (approximately 10 minutes from start on high burn) and will stop automatically once the heater has cooled down. This is particularly useful when a thermostat is fitted, as the fan will not be running unnecessarily. Because the thermodisc is fitted, it is not necessary to operate the switch on the fascia. It can be kept permanently on at the desired speed setting. The fascia switch overrides the thermodisc if it is set in the central "off" position.

EIS-SHUTDOWN

- 1) Use the top rocker switch to turn off the main burner.
- 2) Use the bottom rocker switch, if desired to turn off the fan immediately. If not manually switched off the fan will automatically turn off once the appliance has cooled to a point where no more useful heat can be produced.
- 3) Disconnect all electric power and gas to the appliance if service is to be performed.

ECS II MODELS – OPERATING

NOTE: Full instructions covering the capabilities of this system are detailed in a separate leaflet. Only basic instructions for MANUAL operation are given here.

CAUTION. To avoid the risk of backburning, do not attempt to re-light the fire less than three minutes after it has been extinguished.

ECS II models have an RF control system which does not require the remote to be aimed directly at the heater. They have a handpiece which incorporates the thermostat. If there is no display on the handpiece panel, check the batteries (2 AAA alkaline). When switched OFF, the display will show the day of the week, the time, the room temperature and OFF. See the leaflet for setting the correct day and time.

NOTE. Before using the remote, you must 'teach' the control system to recognise only your particular handpiece.

- Set the remote to OFF by pressing the ON/OFF button if necessary. (OFF will be displayed).
- Turn OFF the mains supply to the heater.

- Turn ON the mains supply to the heater and immediately press and hold both the FAN and PROG buttons for ten seconds. The display will show 'LC', and then revert to the normal OFF display.

LIGHTING THE HEATER

- Check that the power to the heater is switched ON, and that the gas tap is turned ON.
- Press the ON/OFF button. The display will now show one of three modes — MANUAL, AUTO or PROG plus possibly flame and fan symbols. In PROGRAM mode, the OFF may not change to ON, but the word PROG will be displayed.
- Press the AUTO/MAN button repeatedly to step through the three modes until you reach MANUAL. In this mode the thermostat in the handpiece is disabled so that the flame size and fan speed may be controlled as desired. The flame symbol may or may not be showing.
- If the flame symbol is showing, the ignition sequence will commence. After a deliberate time delay (about 7 seconds), the ignition sparking will commence, and if gas is available, the fire will light.
- If the flame symbol is not showing, press the '+' button. When it shows, the ignition sequence will begin as described in the previous paragraph.
- The first time you attempt to light the fire there will probably be air in the pipeline, so flame may not appear before the spark shuts down after about 30 seconds. If this happens, press the ON/OFF button and the flame symbol on the display will disappear. Then press the ON/OFF button again to restore the flame symbol when a further ignition cycle will commence. (Don't forget the 7 second delay between the remote calling for ignition and spark commencement). Repeat this switching OFF and ON as necessary until the gas comes through and the fire lights.
- The heater will always light at the HIGH setting, but will fall back to a lower setting after about 15 seconds unless the top heat setting has been selected.
- Repeated pressing of the '+' button will progress the flame through its six flame heights. The flame symbol on the display will increase in size as the higher heat outputs are selected. Press the '-' button, repeatedly if required, to diminish the flame to its minimum size.
- **When the flame symbol appears on the display**, the fan speed can be selected. Repeated pressing of the FAN button will step the fan speed through its three speeds and OFF setting. (LOW > MED > HIGH > OFF > LOW etc.). Turn the fan OFF by pressing the FAN button while the fan is in its HIGH speed setting. Fan speed settings are displayed to the right of the fan symbol by up to three wavy lines and a number. The more lines, the faster the fan speed.

NOTE. Your fan may be fitted with an internal heat operated switch (Thermodisc) to prevent it blowing cold air. This means that even though the display shows that the fan is switched on, the fan will not start until the heater has

warmed up. The fan will then start automatically (after about ten minutes).

- The flame height and fan speed can be controlled as desired at any time. No harm will result if you turn the fan off (by repeated pressing of the fan button until the fan symbol disappears from the display), and keep the flame alight.

OPERATING IN MANUAL MODE

- To turn the fire on and off, simply press the ON/OFF button, checking that the display shows MANUAL. The flame and fan selections will resume their previous settings, but remember that the fan will not start until the fire has warmed up for about ten minutes if a Thermodisc is fitted.
- Full instructions for AUTO operation and PROGRAM setting are in the separate leaflet. Please read them to utilise the full potential of your control system.

ECS II MODELS - SHUTDOWN

- To stop the fire immediately, press the ON/OFF button once.

THE FIRST FEW FIRES

The first few fires in your stove are part of the curing process. When first operated, the unit will release an odour and the flames will appear orange caused by the curing of the paint, the burning off of the starch in the gas logs and the oils on the metal.

After several fires the starch in the logs may show as a deposit inside the glass. If this film is not removed it will bake on and may become very difficult to remove. When the glass is cold, remove it (see pages 8 & 9) and clean the inside with a non-abrasive cleaner.

DO NOT ATTEMPT TO CLEAN THE GLASS WHILE IT IS HOT. NEVER OPERATE THE UNIT WITH THE GLASS REMOVED.

FAN OPERATION

Note: It is possible to use all fires with the fan not running, although for better air circulation and heat discharge using the fan is recommended.

NORMAL OPERATING SOUNDS OF GAS APPLIANCES

You will probably hear some sounds from your gas appliance. This is perfectly normal due to the fact that various parts expand and contract at different rates. Such noises are **normal operating sounds** and these should not be considered as defects in your appliance.

Fan:

It is not unusual for the fan to make a "whirring" sound when ON. This sound will increase or decrease in volume depending on the speed setting of your fan.

Burner Tray:

The burner tray is positioned directly under the burner and logs and therefore will expand and contract at slightly different rates from the rest of the heater. This can cause "ticking" and "cracking" sounds.

Pilot Flame (Piccolo Only):

While the pilot flame is on it can make a very slight "whisper" sound.

Gas Control Valve:

As the gas control valve turns ON and OFF, a dull clicking sound may be audible, this is normal operation of a gas regulator or valve.

Firebox:

Different parts will expand and contract at different rates resulting in some "cracking" and "ticking" sounds being heard.

GENERAL MAINTENANCE INSTRUCTIONS

- 1) If the top louvres start to discolour, check the glass gasket seat and replace if necessary.
- 2) Clean the appliance, glass and louvres with a damp cloth only when the heater is cold. Never use an abrasive cleaner. Gold trim can be scratched if abrasives are used to clean it. The heater is finished in a heat resistant paint and should only be refinished with heat resistant paint.

- 3) Keep the area near the appliance clear and free from combustible materials, petrol and other flammable vapours and liquids.

WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD KEEP WELL AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

CAUTION: ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING AN APPLIANCE MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

SERVICING INSTRUCTIONS

(Routine maintenance schedule)

Servicing must be carried out only by authorised personnel.

Your Masport heater must be checked yearly by an authorised Technician. This periodic maintenance should cover the following points:-

- 1) Keep the burner and control compartment and any air entry points clean by brushing and vacuuming. Always turn the gas valve to OFF before cleaning. When cleaning the logs, use a clean soft paintbrush, as the logs are fragile and easily damaged.
- 2) Make a periodic check of burner for proper log position and condition. Visually check the flame pattern of the burner periodically, making sure the flames are steady, not lifting or floating.
- 3) The appliance and flue system must be inspected before use and thereafter annually to ensure that the flow of combustion and ventilation air is not obstructed. During the annual service call, remove the burner from the burner tray and clean it. Replace the embers but do not block the air slots.
- 4) Clean the fan of any lint or foreign matter.
- 5) Check the pilot flames (Piccolo only), there should be three strong flames approx. 19 mm long - one flame to the rear burner, one to the ignition electrode and one to the thermocouple.
- 6) Check the operation of the thermostat (if fitted) by turning its control point above and below ambient room temperature and checking the response of the fire.

Other points which can be checked after completing the above:-

- Thermocouple generation
- Gas consumption rate
- Carbon dioxide content in the combustion products
- Flue operation.

LOG REPLACEMENT

The unit should never be used with broken logs. Turn off the gas valve and allow the unit to cool before removing the glass to carefully remove the logs. If a log should need replacement, you must use the proper replacement log. The log positions must be as shown in the diagram on page 9.

Note: Improper positioning of logs may create carbon build-up and will alter the unit's performance.

Malfunctioning due to improper log placement is not covered under warranty.

Note: *The unit MUST NOT be operated without the fan access panel securely in place.*

GLASS GASKET

If the glass gasket requires replacement use 25mm flat glass gasket for the Flush Front, Masport part number 786774 or 10mm flat glass tape for the curved window Masport part number 790229.

GOLD-PLATED TRIM

The 24-carat gold plated finish on the trim requires little maintenance, needing only be cleaned with a damp cloth. DO NOT use abrasive materials or chemical cleaners, as they will harm the finish and void the warranty. **Clean any fingerprints off before turning the unit on.**

GLASS REPLACEMENT

Your Masport stove is supplied with high temperature, 5 mm Neoceram ceramic glass that will withstand the highest heat that your unit will produce. In the event that you break your glass by impact, purchase your replacement from an authorised Masport dealer only, and follow our step-by-step instructions for replacement.

Bay Glass Removal

- 1) Remove the window from the unit (refer to removal instructions on page 9) and place on a soft surface to prevent scratching.
- 2) Remove the nuts holding the glass retainers in place.
- 3) Remove the glass retainers.
- 4) Replace the glass.
- 5) Reverse the previous steps, replace the retainers and fasten with the nuts but do not over tighten, as this can break the glass.
- 6) Refit the window to the fire and check the seal.

FLUSH GLASS REPLACEMENT

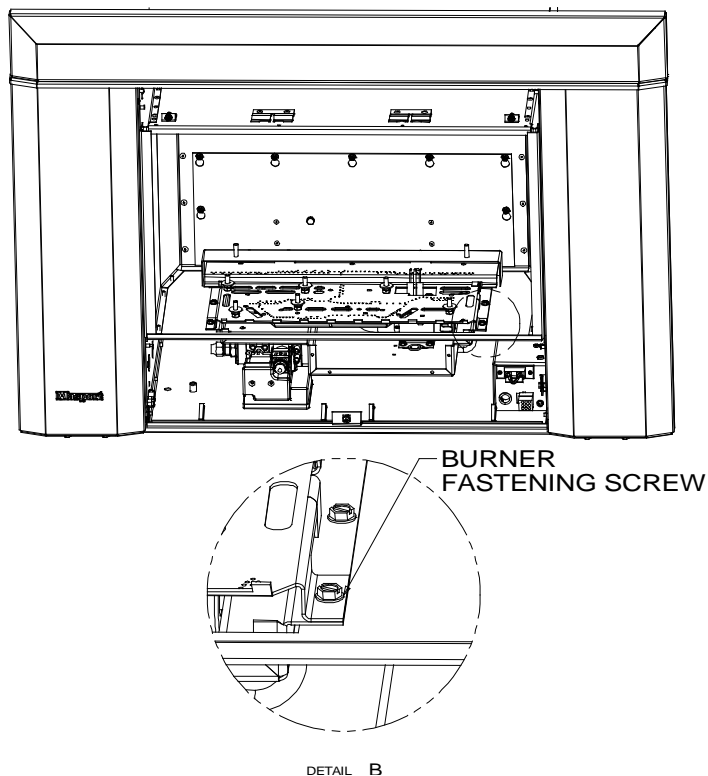
Remove the glass by following the instructions on page 8. Fit the new glass, replacing the gaskets if necessary.

FAN MAINTENANCE

If your fan requires maintenance or replacement, access is via the panel on the rear wall of the firebox.

To remove fan:

- 1) Turn the unit and/or pilot off and allow it to cool to room temperature.
- 2) Disconnect the power source to the fire.
- 3) Remove glass front (see pages 8 & 9).
- 4) Remove logs and embers (see page 9).
- 5) Remove the burner (two screws at the front, refer to diagram on page 18).
- 6) Loosen the screws securing the rear fan access panel in place. Lift and withdraw the panel passing the keyhole slots over the screw heads.
- 7) Working below the burner tray, remove the fan shipping nuts.
- 8) Unplug the fan lead from the plug on the control box (EIS and ECS models). On Piccolo models unplug the fan adaptor loom from the fan switch loom.
- 9) On EIS models disconnect the two push on connectors at the thermodisc terminals below the burner tray.
- 10) Lift and withdraw the fan assembly from its mounting pins on the base of the fire. The fan will come out through the access panel.
- 11) Reassemble in the reverse order.



NG TO LP CONVERSION (EIS & ECS)

This conversion must be carried out by a qualified Technician. Do not attempt this conversion yourself!

- 1) Turn the unit off.
- 2) Unplug or disconnect the power source to the fire.
- 3) Remove the glass front (see pages 8 & 9).
- 4) Remove the logs (see page 9).
- 5) Remove the two screws holding the burner assembly to the burner tray. Push the burner to the left and lift it out.
- 6) Unscrew the brass injector while restraining the elbow behind it to avoid twisting the pipework.
- 7) Discard the 2.96 injector, fit the new LP injector marked 1.7 and tighten. Again avoid twisting the pipe-work.

CLEANING INSTRUCTIONS

The outside of the fascia and glass should need no more than an occasional wipe with a damp cloth to remove any dust which may have settled.

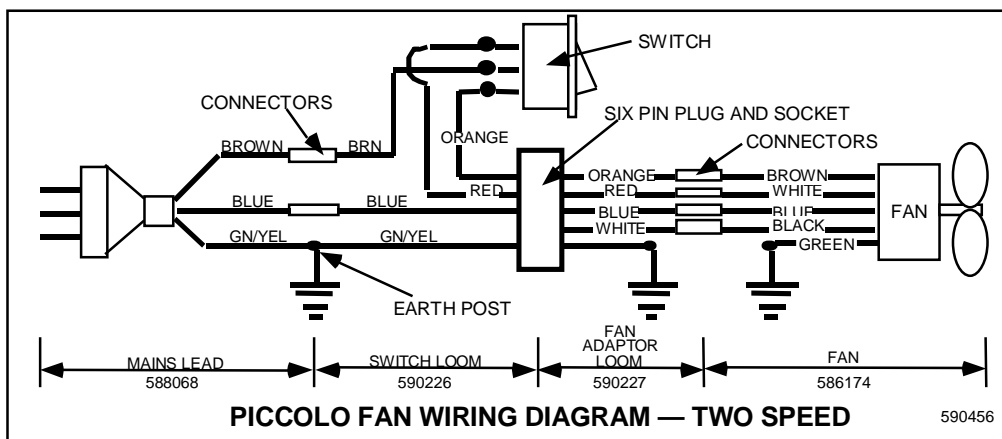
All gas appliances incorporating a live fuel effect and designed to operate with luminous flames may exhibit carbon deposition, particularly if the combustion air entry slots under the heater are obstructed or the aeration air inlets are clogged with lint. Any flame lifting, floating or lighting back should be checked by an authorised Masport gas fire Technician.

After a period of time the inside of the glass may require cleaning. To do this, carefully remove the glass (See Glass Removal and Assembly, pages 8 & 9), and clean the inside surface with a non-abrasive cloth and a non-scratching type household cleaning liquid.

Replace the parts as detailed, keeping fingerprints off the inside glass surfaces.

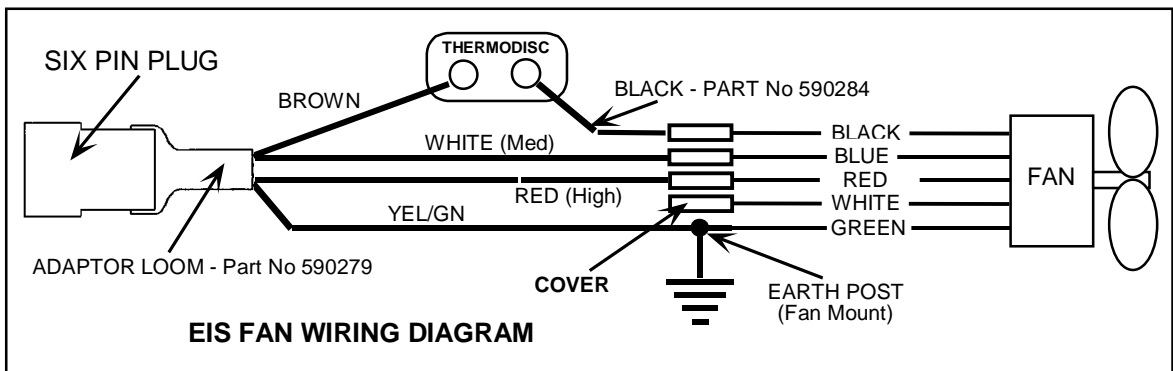
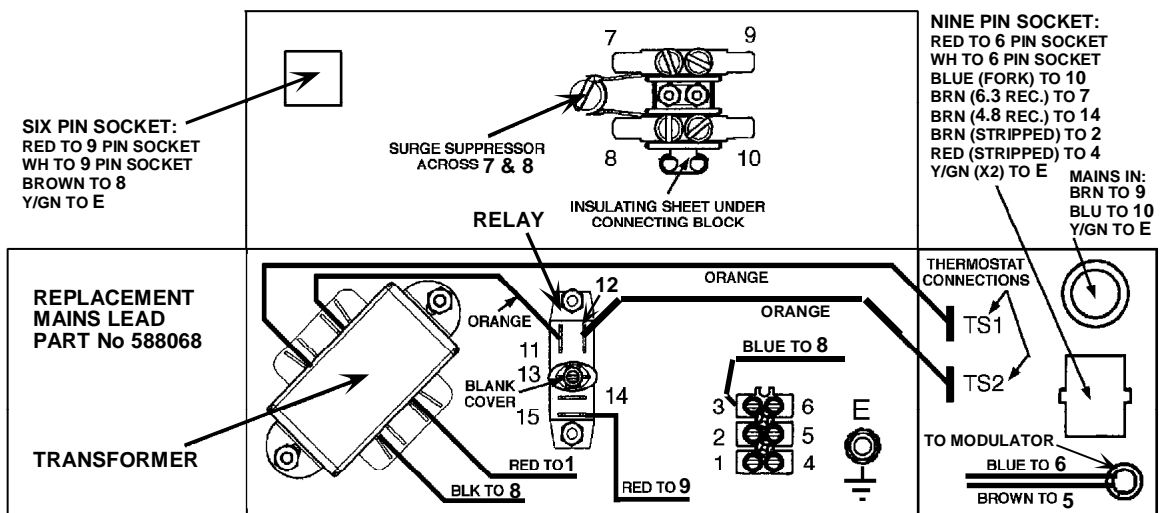
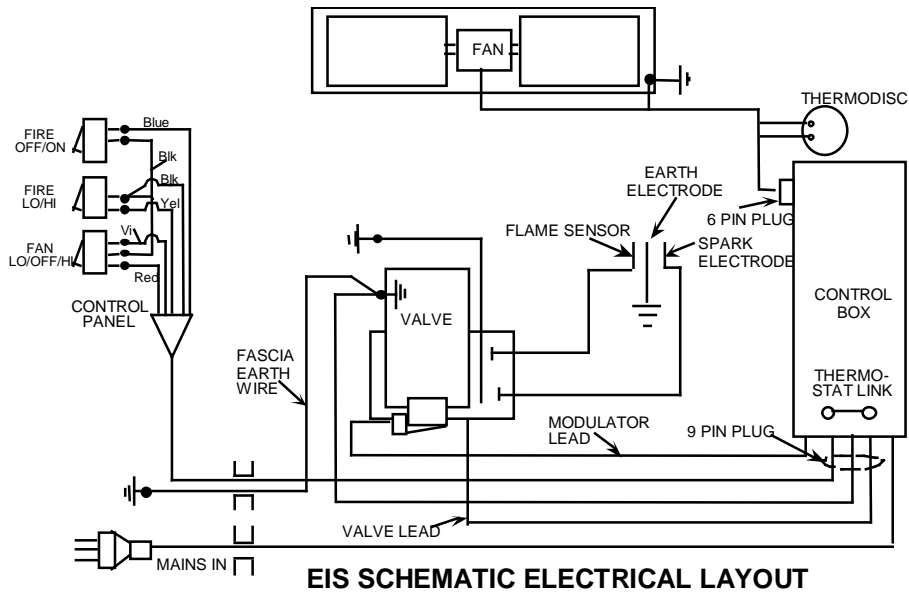
No other user maintenance should be necessary. If you require any other service or adjustments, contact your Technician or Dealer.

PICCOLO WIRING DIAGRAM



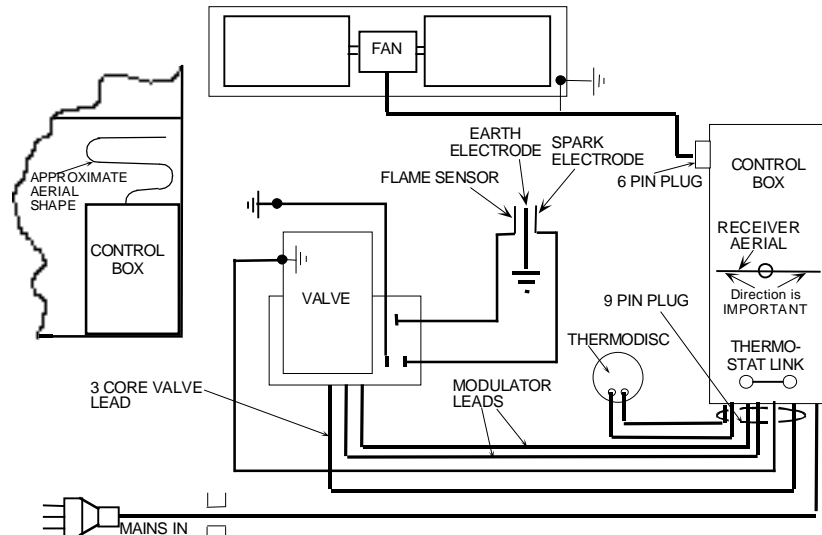
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EIS WIRING DIAGRAMS

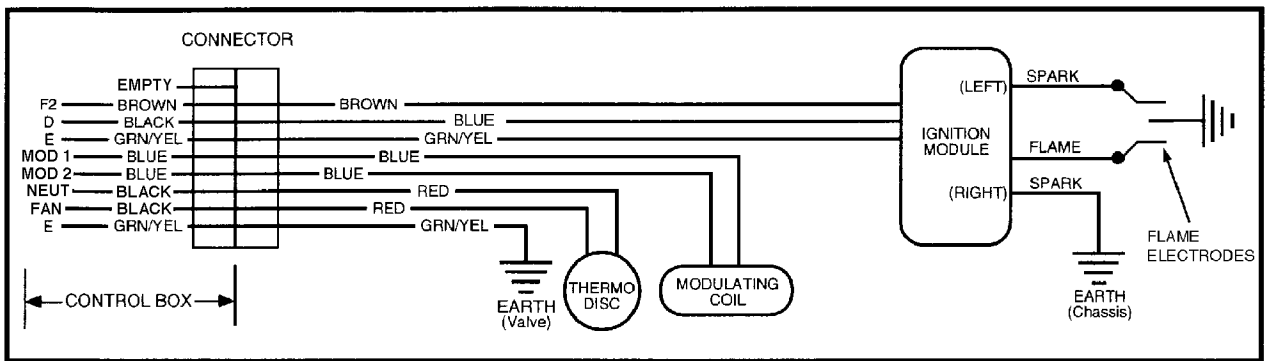


If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.

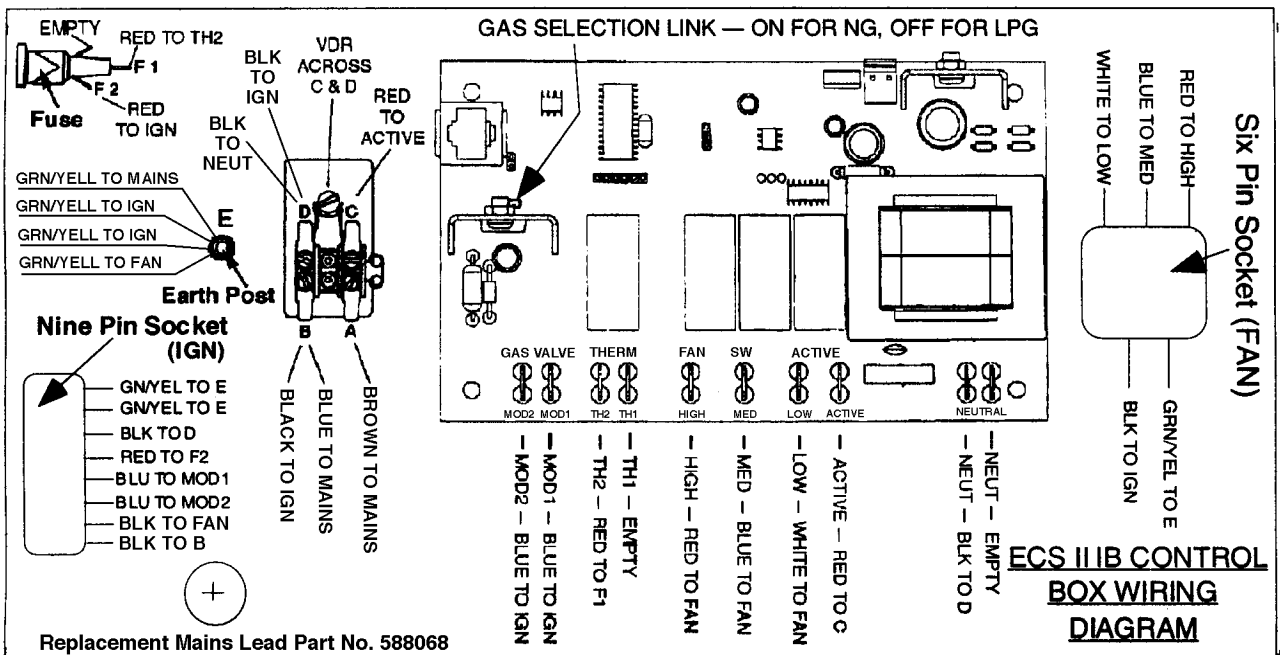
ECS II WIRING DIAGRAMS



ECS II IB SCHEMATIC ELECTRICAL LAYOUT

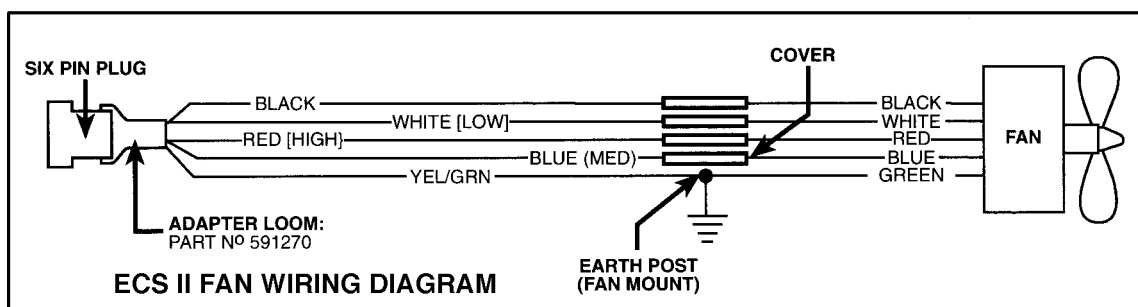


ECS II IGNITION LOOM WIRING



ECS II IB CONTROL BOX WIRING DIAGRAM

Replacement Mains Lead Part No. 588068



If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.

TRUBLE - SHOOTING

The following tables list possible problems and their likely causes. Most of these will require a professional serviceman and we recommend that this work be performed by an Authorised Installer. If a problem cannot be solved after referring to this table, please call your Masport gas fire Dealer for help.

PROBLEM	POSSIBLE CAUSE(S)	SOLUTION
Pilot will not light, and Piezo igniter does not give a strong blue spark. (Piccolo)	Faulty electrode wire connection(s).	Make sure connections are firm, check wire.
Pilot (Piccolo) or main burner will not light (EIS & ECS) even though there is a strong blue spark.	Air in pipeline	Repeat starting attempts until air is cleared
	Stale gas in pipeline after non-use for an extended period (Propane and ULP gases)	Bleed pipeline or persist with starting attempts
	Incorrect lighting procedure.	Follow the instructions in this manual.
	No gas supply at heater.	Check for closed gas valve(s) or faulty gas supply lines.
	Pilot filter or jet blocked. (Piccolo)	Replace filter in control valve - clean jet.
Pilot stays alight (Piccolo), but burner will not light (EIS & ECS moels).	No fuel in LPG system.	Replenish LPG supply.
	Thermostat (if fitted) is switched to OFF or set to a low temperature.	Check thermostat setting. Switch to ON or turn to a higher temperature.
	Thermostat defective, or thermostat wiring to heater is faulty.	If wiring is undamaged and the connections are sound at each end, thermostat may need replacing.
	Ignition spark continues after fire has lit (not Piccolo)	Phase and Neutral connections reversed in the house power wiring
Smell of flue gas in the room.	Flue gas spilling from the draught diverter at the rear of the heater.	Check for flue blockage, negative air pressure in the room or circumstances causing down draught.

PROBLEM	POSSIBLE CAUSE(S)	SOLUTION
Smell of gas in the room.	Pipe fittings may be leaking.	Check all joints for leaks, including the gas supply system, the pilot light supply tube, the main burner supply tube and all connections to the control valve and pressure reducing valve (Piccolo models). Use ONLY a proper leak check solution. NEVER USE AN OPEN FLAME TO CHECK FOR LEAKS
A thin coating of black soot forms inside the glass.	Combustion air supply restricted. Over-supply of gas. Logs or embers out of position.	Clean all primary and secondary air passageways. Adjust gas delivery pressure at test point. Arrange logs/embers correctly.
A white coating forms inside the glass.	Residues in new logs being burned off.	Follow glass cleaning directions under Cleaning Instructions.
Fan hums but there is poor air circulation.	Dirty fan impeller	Disconnect electrical power. Remove and clean fan impeller.
Fan will not run.	No power to fan.	Make sure fan plug is firmly home and that fan switch is not in the OFF position. Check that the power socket works with another appliance.
	Thermodisc not activated (EIS & ECS models)	Wait until heater achieves working temperature.
Fire cycling on and off too rapidly.(Thermostat models only)	A large fire in a small room.	Turn flame down to a lower setting.
	Incorrect positioning of thermostat.	Move hand thermostat or wall thermostat further away from hot air stream from heater

ANNUAL SERVICE RECORD

DATE	SERVICE DETAILS	SERVICED BY

INSTALLED BY: _____

DATE: _____

**Masport Gasfires are manufactured in New Zealand by
 MASPORT LTD. 1/37 MT WELLINGTON HIGHWAY.
 P.O. Box 14-349 Panmure, Auckland New Zealand.
 A.G.A. Approvals:
 Piccolo, Sofia & Madrid - All Certificate No 6361**