



**LATITUDE**  
**G4500 – G4520 MODELS**  
**FLUELESS GAS HEATER**  
**USER, INSTALLATION & SERVICING**  
**INSTRUCTIONS**

FOR USE IN THE COUNTRIES STATED ON THE DATA PLATE AND CARTON  
WITH NG or LPG  
(REFER TO RATING LABEL)

**EVEN IF YOU HAVE FITTED THESE FIRES BEFORE,  
PLEASE FOLLOW THESE INSTRUCTIONS STEP BY STEP.**

***Legislation and regulations do change over time!***

**This product is not suitable for primary heating purposes.**

**LEAVE THESE INSTRUCTIONS WITH THE USER**

TO OBTAIN YOUR FIRST YEAR GUARANTEE, THE INSTALLER AND CUSTOMER  
MUST FILL IN THE SEPARATE GUARANTEE AND RETURN IT TO  
BURLEY WITHIN 7 DAYS OF FITTING.  
A FREE SECOND YEAR GUARANTEE IS ALSO OFFERED BUT THIS IS SUBJECT TO THE FIRE BEING  
SERVICED BY A GAS SAFE™ REGISTERED INSTALLER (FORMERLY CORGI) DURING THE FIRST  
YEAR OF OWNERSHIP. PROOF OF SERVICING MUST BE RETAINED  
**FAILURE TO HAVE THIS APPLIANCE FITTED BY GAS SAFE™ REGISTERED INSTALLER (FORMERLY  
CORGI) FITTER INVALIDATES THE WARRANTY**

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**G4500-20InstUser**  
**March 2019**

## INTRODUCTION

Thank you for choosing this Burley product. Our products carry a CE mark which is awarded by an independent test house (notified body) and shows the fires have been type tested to meet the requirements of the European Gas Appliance Regulation and the appropriate British Standards.

This is a highly efficient Flueless Visual Flame Heater. The burner system is very clean burning and a catalyst cleans the combustion products even further.

### Efficiency Declaration

This appliance has a thermal efficiency of 100% giving an Energy Efficiency Index of 91%. Which is **A** rated on all variants & emits less than 130mg/kWh NOx.

### Declaration of Conformity

Burley Appliances declare that the appliance described in "Technical data" conforms to the following standard(s) BS EN14829:2007

Please demonstrate the appliance method of operation to the customer before leaving.

An oxygen depletion sensing pilot light is fitted and will sense any significant oxygen depletion in the room and shut the fire down safely.

## **1. TECHNICAL DATA**

Refer to the appliance data badge affixed to the gas connection access cover shown on page 4

**ENSURE THAT THE LOCAL CONDITIONS OF USE CORRESPOND TO THE DATA ON THE BADGE**

	<u>Propane G31</u>	<u>Butane/Propane</u>	<u>Natural Gas</u>
<b>Category</b>	I3P	I3+	I2H
<b>Supply Pressure</b>	37mbar	28/30mbar	20mbar
<b>Inlet Pressure</b>	37mbar	28/30mbar	20mbar
<b>Injector</b>	Elbow 92/90	Elbow92/90	Elbow92/180
<b>Pilot Type SIT</b>	LPG9280	LPG9280	NG9116
<b>Heat Input net</b>	<b>High</b> 2.5kW	<b>Low</b> 1.7kW	
<b>Inlet Connection</b>	<b>8mm Compression</b>		

The inlet pressure must be **within +/- 1mBar** of specification with **all** gas appliances in the house switched on **and also** with just the Burley heater operating. If outside of this tolerance the fault is most likely to be in the installation pipe work, regulator on the bottle or bulk supply regulator. It may be necessary to call the gas supplier if on a bulk or communal supply. The fire will not operate correctly if the pressures are incorrect.

In the event of gas leakage the supply must be turned off at the nearest isolating valve.

## **2. UNPACKING THE APPLIANCE**

- 2.1** Carefully examine the carton for damage before unpacking. If it is obviously damaged, consult the supplier as to whether to proceed with the installation.
- 2.2** Make sure the carton is stood upright and open the top.
- 2.3** Remove the fittings boxes contained within and open them and check the condition of the contents. Remove the fire and examine its general condition, paying particular attention to the frame, the glass front and fire box flanges.
- 2.4** If satisfied by the general condition, place the decorative components to one side and proceed with the installation. If in any doubt, seek advice from the supplier. **Read these instructions fully before proceeding even if you have fitted this model before.**

**THE APPLIANCE IS NOT TO BE RECESSED INTO THE WALL FOR SAFETY AND OPERATIONAL REASONS**

### **3. GENERAL REQUIREMENTS**

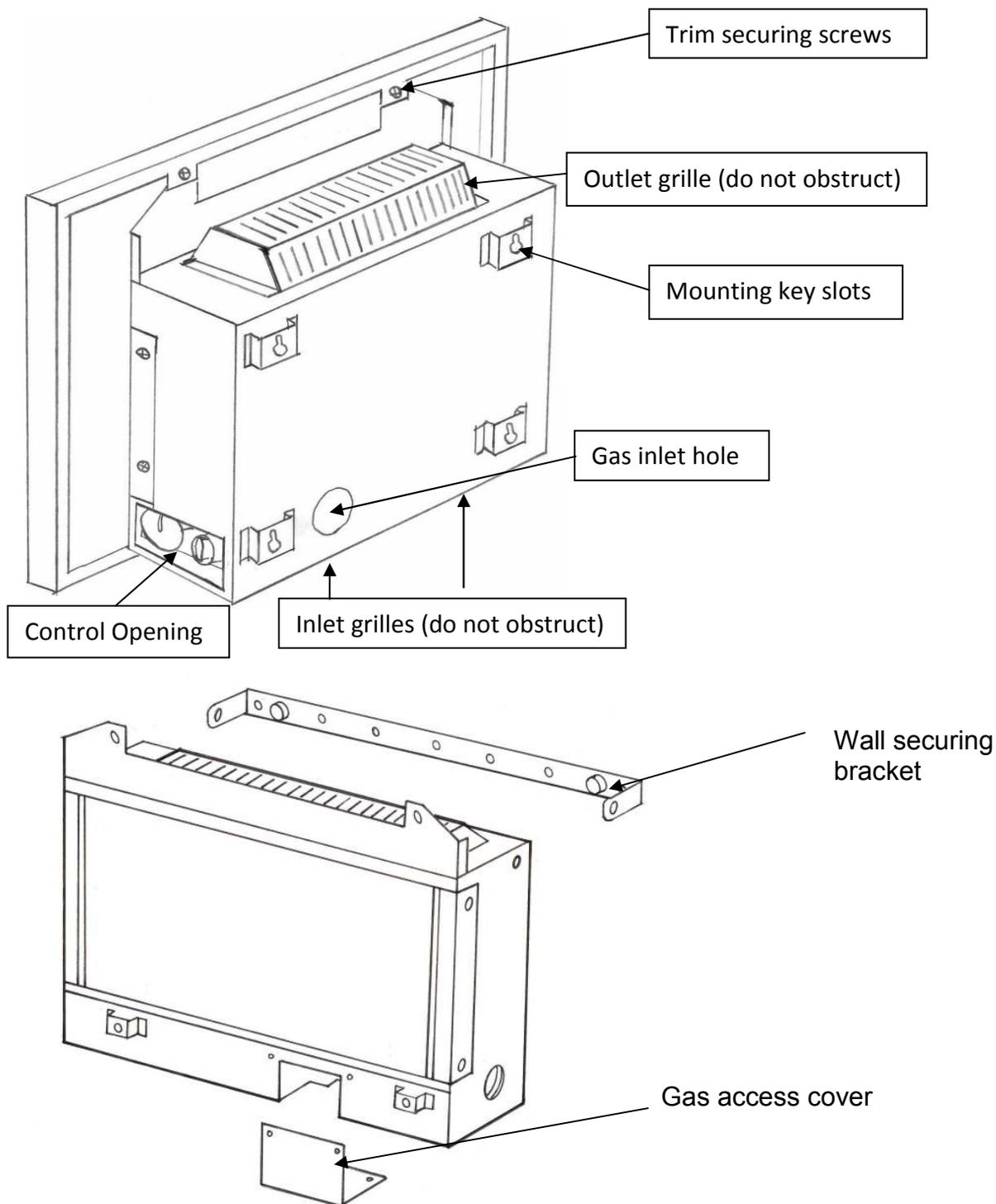
- 3.1** Gas appliances must be installed in accordance with the rules in force. In the UK it is the law that all gas appliances must be installed by a Gas Safe™ registered installer (formerly CORGI), in accordance with the Gas Safety (Installation and Use) regulations (as amended). The installation must also be in accordance with the relevant parts of local and national building regulations and in accordance with BS5871 pt4 except where Burley instructions state differently. For the Republic of Ireland, reference should be made to IS813 and ICP3 and any guidance notes from Bord Gais. Failure to have the fire fitted by a qualified person nullifies **ALL** guarantees.
- 3.2** The space to be heated must have a wall vent of at least 100cm<sup>2</sup> of ventilation and an openable window or patio door that communicates directly to the outside. The vent must be positioned at least 1 metre away from the appliance, in the Republic of Ireland two vents of not less than 60cm<sup>2</sup> each, one not less than 1.6m above the other, must be installed in the room.
- 3.3** When providing ventilator openings consideration must be given to the avoidance of locations where discomfort from draughts may cause the user to block the openings. Similarly the possibility of curtains or furniture blocking ventilation openings must be considered. **Floor vents, ceiling vents, closable window vents or chimneys are not suitable means of ventilation.**
- 3.4** Working surfaces include the air outlet grille.
- 3.5** The heater must not be used in a room of less than 30m<sup>3</sup> in volume. Adjoining spaces not separated by a door may be included. To convert cubic feet (ft<sup>3</sup>) to cubic metre (m<sup>3</sup>) divide the room volume in cubic feet by 35.3.
- 3.6** The heater must not be installed in high rise blocks of flats, bed sitting rooms, basements which are not open on at least one side, bathrooms, bedrooms, in corridors stairways landing or hallways of multi occupancy dwellings, garages or rooms containing petroleum products.
- 3.7** Soft furnishings, decorations and wall coverings etc. must not be placed within 1 metre of the appliance and its convection outlets (see 5.0). Be aware of curtains etc which could be blown towards the appliance.
- 3.8** The heater is intended as a **secondary heat source**. Check that a primary source of heat (such as a radiator) is present in the room. If insufficient primary heat is being used there may be a build up of condensation, if this is the case, please warn the customer of this.
- 3.9** The heater must not be used in rooms where the atmosphere is likely to contain water or chemical vapours which may adversely affect the appliance or its finish.
- 3.10** Do not use whilst painting & decorating, or in newly decorated rooms as the residues can lead to unpleasant smells from the appliance. Always cover or have the appliance removed when decorating. (See points to note on page 14)
- 3.11** Candles too close to the fire may melt. Scented candles must be at least 1 metre away from the appliance.
- 3.12** Air freshener residues can enter the appliance and lead to residual odours, especially the plug in type.
- 3.13** The catalyst is not an air cleaner and presence of odours is unlikely to be catalyst failure.
- 3.14** Houses with warm air heating systems, solid walls, or no damp proof course may be unsuitable for flueless appliances.
- 3.15** This heater does not contain asbestos.

## 4 INSTALLATION INSTRUCTIONS

**Before** working on pipe work, plug the ends to prevent the entry of debris. Decide upon the route for the gas and lay pipes as required. Where pipes pass through walls they must be sleeved.

**Before** connecting any pipes to the appliance, fully purge pipes of debris or swarf etc. and connect the gas supply to the 8mm elbow on the fire. Leak test the supply using an approved method. Fires can be connected to the supply using semi rigid pipe i.e. copper tube also independently certified, hand bendable corrugated stainless steel connection pipe (such as Forma Pipe™) may be used with this appliance

Note: An isolating valve must be situated near the appliance for servicing.



**THE APPLIANCE MUST NOT TO BE RECESSED INTO THE WALL FOR SAFETY AND OPERATIONAL REASONS**

- 4.1** The appliance is a flueless visual flame heater designed to be fixed on to a flat wall. It **MUST NOT BE INSET INTO THE WALL** as this could block the inlet and outlet passageways from the fire leading to a hazard. The wall on which the appliance is to be fixed must be upright and flat. Failure to observe this could result in the appliance becoming twisted or damaged.
- 4.2** If the appliance is to be mounted on a dry lined or a timber framed construction wall then the integrity and ability of the wall to carry the weight of the appliance must be confirmed. It is important in these circumstances that any vapour control barrier is not damaged, and that any structural members of the house frame are not damaged.
- 4.3** Care should be taken with wall coverings as heat may discolour them over time.
- 4.4** Any combustible materials directly behind the fire must be removed and replaced with suitable non combustible material such as supalux board, calcium silicate, cement or similar. Only the frame supplied with the appliance must be used. Any other type could become damaged, effect combustion or overheat the gas controls.
- 4.5** The appliance is designed to be wall mounted alone and not in conjunction with any type of combustible fire surround.
- 4.6** If an existing fireplace or flue is in the wall behind or adjacent to where the fire will be fitted, it **MUST** be blocked off completely to prevent suction on the back of the appliance. The top of the flue should also be capped off to prevent the entry of moisture etc, consult building control if in any doubt.

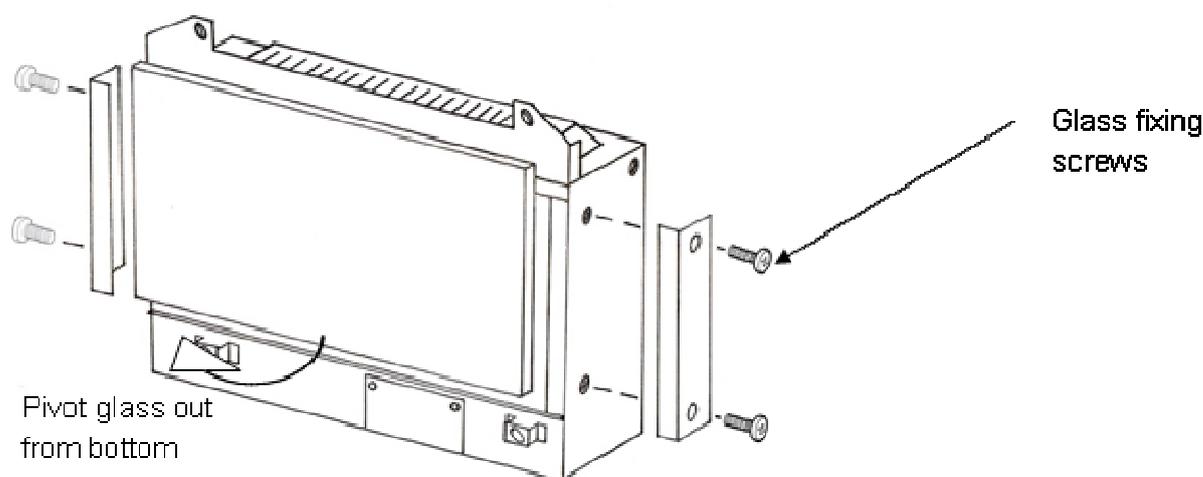
## **5. CLEARANCES TO COMBUSTIBLE MATERIALS AND SHELVES**

- 5.1** A non combustible shelf with projection less than 100mm may be fitted to within 500mm of the top edge of the fire frame. Note that shelves will get hot and delicate ornaments, wax candles etc should be kept away from hot surfaces. No combustible shelves should be fitted for at least 1 metre above the appliance and a similar clearance should be maintained to ceilings.
- 5.2** As with all heaters the possibility of convection staining on surfaces in the vicinity of the heater should be considered and the user advised. Particular attention should be taken to ensure soft furnishings such as scatter rugs and curtains are kept at least 1 metre from the appliance.
- 5.3** **On no account should glass mirrors or picture frames or any electrical equipment e.g. plasma screen TV's be fitted or positioned on the wall above the appliance as the heat rising could damage them.**
- 5.4** **The user shall be advised when relevant that hot convection air from the grille outlet induces the possibility of staining on surfaces in the vicinity of the appliance. This can be caused by the effect of heat on the finish and also burned dust & tobacco particles etc. being carried in the convection currents of the fire. Particular attention should be taken to ensure soft furnishings such as soft cushions and curtains are kept at least 1 meter from the appliance. Blown vinyl and flock and embossed wallpapers can be scorch damaged by being too close to a heat source and may discolour over a period of time.**

## **6. PREPARING THE APPLIANCE**

Unpack the heater (section 2).

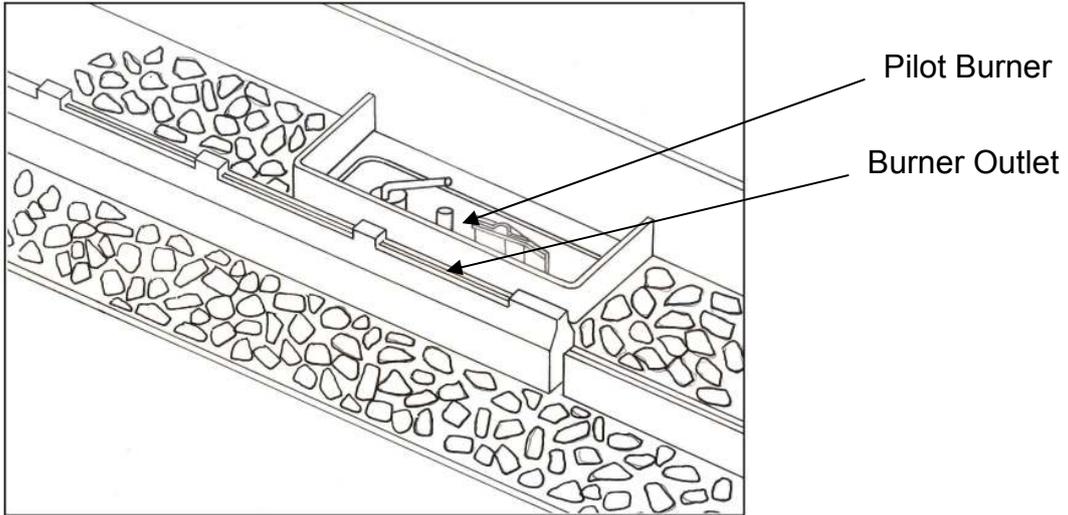
- Ensure appliance is correctly marked for the gas it is to be used with. Take the appliance components and lay them out in an ordered manner. To prevent damage the decorative frame and fire bed components can be placed safely to one side. Note how the frame attaches to the fire.
- **DO NOT ATTEMPT TO USE THE APPLIANCE WITH BROKEN/DAMAGED COMPONENTS.** Contact our service department 01572 756956
- **REMOVING AND REFITTING GLASS & DECORATIVE TRIM**  
To remove the glass, remove the decorative trim and then the 4 glass fixing screws in the side frames and pivoting it out from the bottom then remove glass from its top channel. Refitting is done in reverse order.



- **Decide upon the route for the gas supply** and if this is to be a concealed supply, use the dimensions shown in the diagram on the inside of the rear cover page, remove the knockout and lay in the supply as required. Note the supply can be either concealed through the holes in the appliance back or surface fitted but where pipes pass through walls they must be sleeved. If the gas pipe passes through a wall, cavity or un-vented void then there should be no joins in this area and the pipes should be fully sleeved preferably in factory sleeved pipe.
- The fire must be mounted minimum 200mm from floor level
- **Hang the appliance on the wall and fix into position.**
- Fully purge pipes of air and any debris and connect the gas supply to the 8mm isolation elbow supplied with the fire. Leak test the supply using an approved method.

## **7 OPTIONAL FUEL LAYOUT**

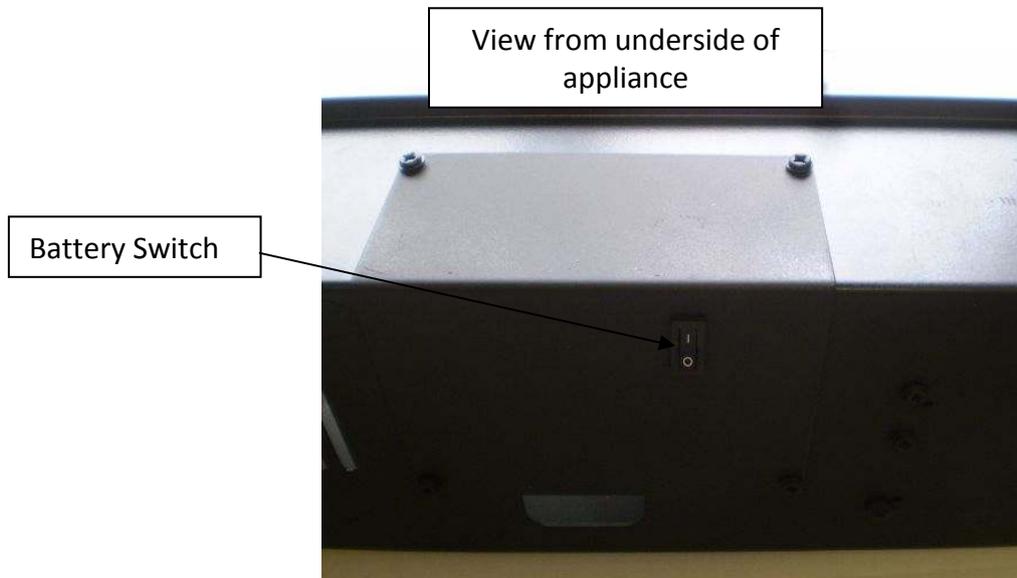
A bag of loose chippings is supplied for fitting in the appliance. If desired, they may be distributed in the chippings trays to the front and rear of the burner outlet. Chippings should be evenly distributed and it is very important that on no account should the chippings obstruct the burner outlet, flame paths or pilot burner. Always replace the glass after laying the chippings. **Do not attempt to use the unit with broken / damaged glass. Do not use additional or non-standard chippings, coals, logs etc.**



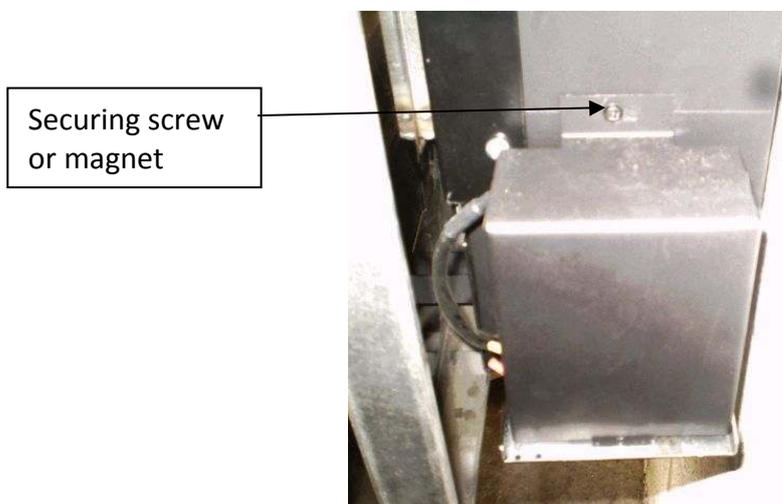
## **8**

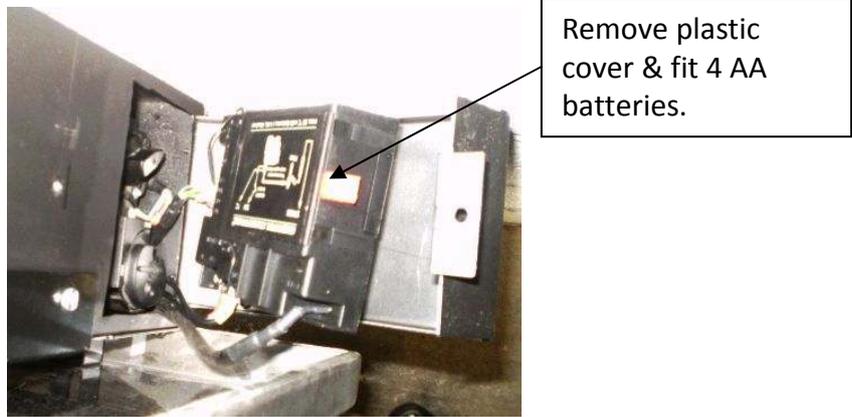
### **Control Receiver Unit**

Press the battery switch on the gas access cover to the O position.

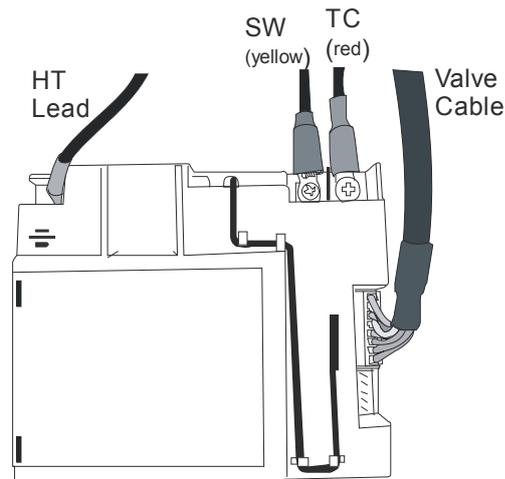


Undo the securing screw for the receiver holder on the right hand side of the appliance as shown below.





If required connect the cables from the valve to the receiver as shown. Do not force the valve cable plug when inserting into the receiver – it only fits one way.

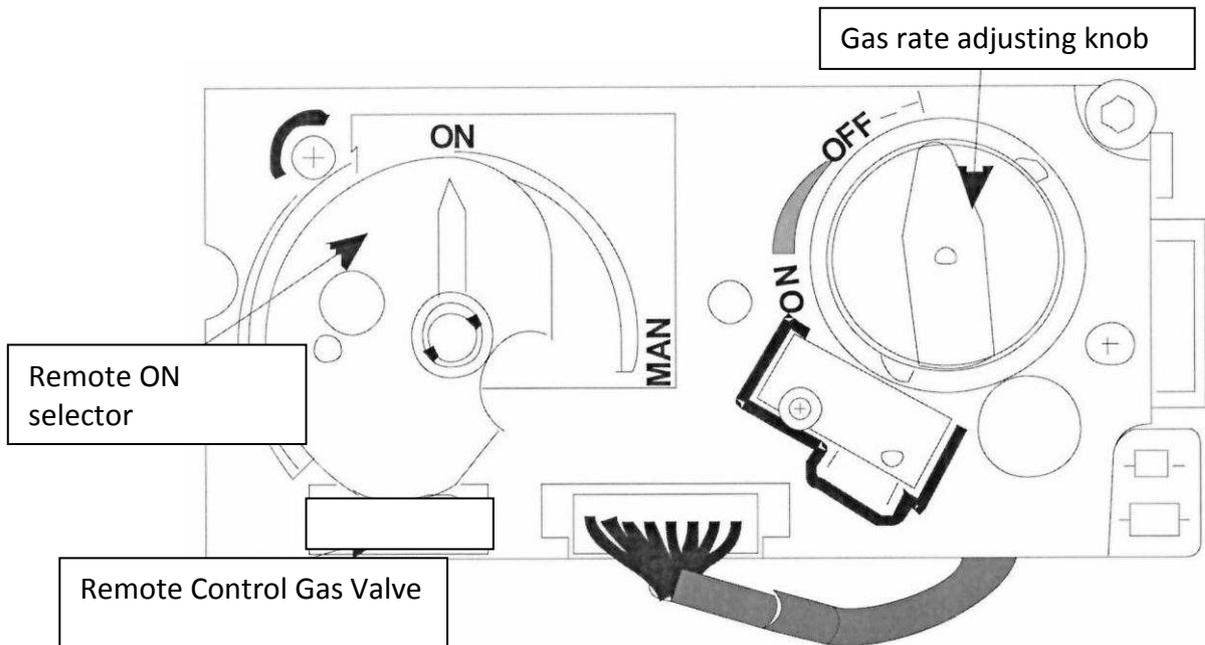


Ensure the battery switch on the gas access cover is in the O position & fit four AA (1.5V) batteries into the receiver unit. Fit the PP3 (9V) battery into the transmitter (hand set). Press the battery switch located on the underside of the gas access cover to the (I) position. The handset should arrive already paired to the receiver, if the handset does require pairing to the receiver turn to section 9.6.

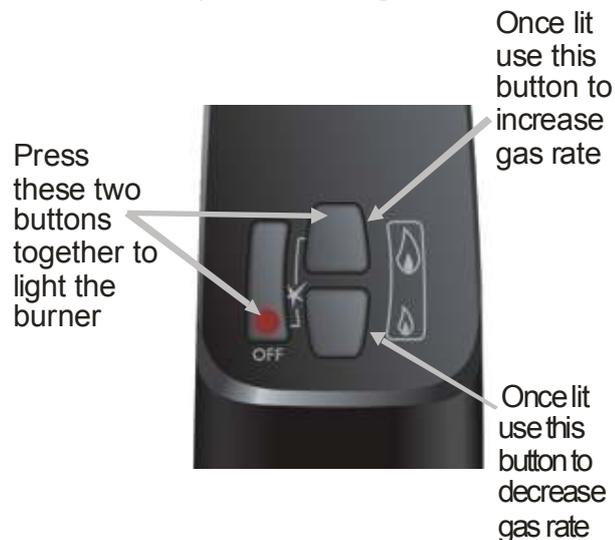
Re-attach the holder to the appliance.

## 9 Lighting the Appliance

Ensure that the battery ON/OFF switch located on the underneath of the appliance is in the ON position (I) & that the MAN/ON selection knob is also pointing upwards towards its ON position (see below).



Simultaneously press and hold the ● (red circle) and 🔥 (large flame) buttons until an acoustic signal confirms the start sequence has begun, then release the buttons.



- 9.1 The acoustic signal should cease and be replaced with the ticking sound of the spark igniter. When the pilot flame is lit the igniter will stop & another acoustic signal will confirm the pilot has been established (if the pilot fails to establish repeat the process. Due to the safe & efficient nature of the fire it is not unusual for this to take two or even three attempts). The acoustic signal will now cease & the gas rate adjusting knob will automatically turn to its high setting.
- 9.2 To adjust the gas rate to desired setting press the 🔥 (large flame) to increase the flame height or 🔥 (small flame) to decrease the flame height on the handset.
- 9.3 To leave the fire in **standby mode** press the 🔥 (small flame) until the main burner goes out. The pilot should remain on in this mode & help to reduce condensation.
- 9.4 **To turn the fire off** completely (including the pilot) press the ● red OFF button on the handset.

## 9.5 Battery Replacement

### **Handset**

On the back of the handset remove the battery cover by pressing down the top of the cover & sliding it down. Remove & unclip the old battery & replace with a new PP3 9 volt battery.

### **Receiver Unit (located on your right hand side behind the trim)**

Switch the battery isolator switch (located on the underside of the gas access cover) to the (O) position. Lift the unit from its carrier carefully noting the pathway of the associated wiring. Remove the top cover, remove old batteries & replace with four new AA batteries ensuring the polarities are correct. Replace the battery cover & return the receiver unit to its original position. Switch the battery isolator switch back to the (I) position.

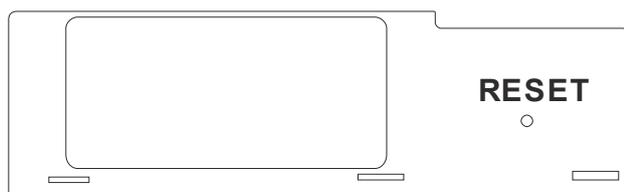


**CAUTION:** With the exception of battery replacement the receiver must be located in the carrier **at all times**.

## 9.6 Pairing Handset to Receiver

If for some reason the remote handset requires re-programming to operate the receiver follow the procedure below:

1. Press and hold, using a pointed object, the receiver's reset button until you hear two acoustic signals.
2. After the second longer acoustic signal, release the reset button and within the subsequent 20 seconds, press the  (small flame) on the remote handset until you hear an additional long acoustic signal confirming the new code is set.



**DUE TO THE SENSITIVE NATURE OF THE PILOT, IT IS NOT UNUSUAL FOR THE PILOT TO EXTINGUISH UP TO/AFTER 1 MINUTE WHEN FIRST LIT. RE-LIGHT AND THE PILOT WILL STAY ALIGHT.**

## **10. COMMISSIONING**

- 10.1 TEST THE GAS PRESSURE.** Turn the fire on full, attach a manometer to the inlet test point and ensure there is a pressure of 20mbar (+/- 1mbar) for natural gas appliances, 37mbar for propane appliances & 28/30mbar for butane/propane mix. Now turn on every other gas appliance in the house and re-check the pressure. The pressure must still be within the tolerance of +/- 1mbar. Now turn off all the other gas appliances and turn the fire down to pilot only, the pressure must still be within the tolerance of +/- 1mbar. If it is not TRANSCO, BORD GAIS or the gas supplier must be called to adjust the governor to the house before the fire can be commissioned further. **Call outs to fires with incorrect pressures will be chargeable.**
- 10.2** Brief the customer on the operation of the appliance and give them all the instructions. The customer must be told of the need for regular servicing of the appliance, this will be at least once a year and be made aware that no rubbish is to be thrown onto the fire bed. The customer must also be made aware that purpose provided ventilation should be checked regularly and not be blocked.
- 10.3** **If you have any questions or the fire is not operating correctly, phone the Burley help-line BEFORE you leave the installation.**
- If the appliance is not fitted in strict accordance with these instructions, Burley cannot be held responsible for any damage caused and reserve the right to charge for any corrective work. Double check standing and working pressures and securely seal all relevant open chimneys and flues.**
- 10.4 Oxygen Depletion Pilot System** There is a highly sensitive oxygen depletion sensor designed into the pilot light and may not light first time or may extinguish after a few minutes, please advise the customer of this. If any part of the OXY Pilot is damaged the entire unit must be replaced. Do not attempt to bend or alter the flame head, thermocouple or aeration hole. Use only genuine spare parts as similar looking parts from other appliances may well give different or inferior performance and could lead to a hazard.
- 10.5 Fireguards** A fireguard is not supplied with this appliance and being wall mounted, the need for one will have to be assessed depending on the position, height from ground of the fire; however it is recommended that a fireguard to BS8423 is fitted if the fire is to be used in the presence of young children, the elderly and the infirm.
- 10.6 Completion of Warranty Card. The installer section of the guarantee card must be filled in fully to validate the warranty. I.e. pressure, model, room size and Gas Safe™ registered installer (formerly CORGI) number**

## **11. SERVICING INSTRUCTIONS**

**As with all gas appliances the unit must be serviced at least once per year, preferably at the beginning of the heating season. All servicing must be carried out by a qualified service person.**

Before commencing any servicing, ensure that the gas is turned off to the appliance and that the appliance is cool.

- Cleaning – If required the casing should be wiped with a cloth dampened in soapy water, glass may be cleaned with any non-abrasive cleaner such as ‘hob brite’.
- Unscrew the decorative frame to remove. Unscrew the four screws holding the glass side frames, remove and place thoughtfully to avoid damage or injury.
- Carefully remove the loose chippings (if fitted) and remove any dirt with a soft brush (paint brush) and clean the burner and associated parts using a vacuum cleaner. Take particular care to remove all debris around the pilot light.
- We recommend the use of a HEPA filtered vacuum to remove any dust and soot accumulated in the heater before and after working on it. Normal hygiene rules of not smoking, eating or drinking in the work area should be followed.
- Disconnect the gas supply to the appliance.
- Clean around all air inlet grills removing all lint in the area of the injector and ensuring the pilot light aeration hole and flame head are clean. Injectors – Only original manufacturer’s parts must be used, see section 12 for identification. Should the oxypilot system need to be replaced the original manufacturer’s parts must be used.
- Controls – The GAS CONTROL IS FACTORY SET AND NORMALLY NEEDS NO ADJUSTMENT. Check for smooth operation of the gas valve. Remove access cover & check the tightness of the thermocouple connection into the valve and the security of the ignition lead.
- Examine the fire casing, the firebox and catalytic converters for obvious signs of damage or degradation. Clean out any dirt or dust accumulated in the bottom of the fire. Reassemble in reverse order.
- Test all joints for leaks.
- Following the manufacturer's instructions, re-lay the chippings if used and replace the glass.
- Light the fire using the method in section 9 and ensure that the pilot lights consistently and the pilot flame envelopes the thermocouple. Once the burner has lit press the small flame button on the handset to ensure the valve has turned the gas down to its low rate. The gas manifold pressures are factory preset using highly accurate equipment and do not normally need adjustment.
- Run appliance for 15 minutes, ensuring burner flames settle evenly.
- A combustion analysis check should then be carried out. Using an analyser to BS7927, first zero the equipment and sample the entire width of the combustion product outlet. Ratio of CO/CO<sub>2</sub> should be less than 0.002 within 30 minutes. (20ppm CO per 1% CO<sub>2</sub>) A reading of CO in the room centre should give a rise of less than 9ppm over ambient, peak reading. The catalyst is unlikely to need replacement during the life of the heater but if the combustion is suspect, disconnect the appliance and contact the manufacturer. See the additional information on testing found in section 13.

## 12. PARTS LIST

<u>Part</u>	<u>Natural Gas Part No.</u>	<u>LPG Part No.</u>
Remote Control Handset	REM1924	REM1924
Remote Control Valve	VAL1921	VAL1921
Remote Control Receiver & Handset	VAL1924	VAL1924
H.T. Lead	CAB1921	CAB1921
Pilot Light Assembly	OXY4240NG	OXY4240PR
Gas Injector	NOZ4241NG	NOZ4240PR
Magnetic Unit (valve)	MAG-UNIT	MAG-UNIT
Cable Interrupter Connector	CAB1922	CAB1922
Chippings	CHIP1000 700g	CHIP1000 700g
Glass	GLA4500	GLA4500

USE ONLY GENUINE REPLACEMENT PARTS.

Parts ordered from our factory will normally take 5 – 7 working days to be delivered.  
An 'Express service' is available upon request.

### Installation and Operational Troubleshooting

The table below is intended for problems related to the fire and its gas controls. It is a guide only and does not take into account every eventuality. Servicing must be carried out in accordance with the current Gas Safety (Installation and Use) Regulations, by a competent person.

It is recommended that the purchaser seek the advice of the original installer in case of encountering any problems.

<b>Remote Control</b>		
<u>Symptom</u>	<u>Cause</u>	<u>Remedy</u>
<b>Main burner will not come on when required even though the drive motor is heard to be operating</b>	Ignition knob incorrectly set	Turn the remote selector upright to the ON position (Section9).
<b>Motor not functioning when buttons are pressed</b>	a) Flat hand set battery	Replace battery (1 X PP3)
	b) Flat batteries in receiver unit	Replace all 4 AA batteries
<b>Remote Control will turn fire off but will not turn on</b>	Incorrect hand set operation	Ensure both buttons are pressed simultaneously to turn on
<b>A prolonged audible signal is heard when attempting to light the fire with remote hand set.</b>	ON/OFF switch on battery box is in OFF (0) position.	Turn the battery switch to ON (I) position.



**Warning:** If you are in any doubt about fumes, you must stop using the appliance immediately and seek expert advice. Do not use appliance until the fault has been rectified.

**BURLEY APPLIANCES IS THE ONLY COMPANY TO BENCH RUN AND THOROUGHLY TEST EVERY SINGLE GAS FIRE IT PRODUCES. BURLEY IS IN THE UNIQUE POSITION OF KNOWING THAT EVERY APPLIANCE LEAVES THE FACTORY IN PERFECT WORKING ORDER**



**NOTE:** If any part of the pilot assembly (i.e. thermocouple, electrode, jet or burner) becomes faulty the whole pilot assembly will need changing.

### **13. Flue Gas Analysers – Installation & Servicing Facts**

- Please read this sheet even if you have fitted our fires before.
- Please leave these instructions with the customer as reference for future servicing of the appliance.
- Please explain to the customer how the fire works and the details and facts listed in these instructions, particularly what the catalyst does and doesn't do.
- If you have any doubts about the test procedure please visit our website or call our technical help line

#### **Testing Method**

- Before testing ensure that the minimum room size is correct for the heat output of the fire. For Burley Fires it is 30cu<sup>3</sup> for 2.5kw output, 40cu<sup>3</sup> for 3.5kw and 50cu<sup>3</sup> for 4.2kw.
- In all installations regardless of room size there must be an air vent positioned at least one metre from the fire at either high or low level through an outside wall providing 100cm<sup>2</sup> of free air. (For the Republic of Ireland 2 vents of not less than 60cm<sup>2</sup> must be provided at high and low level, with minimum vertical separation of 1.6m).
- The analyser used must be manufactured to BS7967 and the test must be carried out in accordance with BS5871 Pt 4
- The catalytic converter needs heat to work, therefore before you start testing; the fire must have been lit and burning on full for at least 15 mins.

There are two tests to carry out with an analyser. A Co / CO<sup>2</sup> ratio test and a room centre CO test.

1. The first test is the CO / CO<sup>2</sup> ratio test and should be carried out at the fire outlet grille, do not place the probe of the analyser in through the grill but move the probe back and forth on top of the outlet grille. (We use a piece of perforated 8mm pipe attached to the analyser with flexible rubber tube). You should record a ratio of no more than 0.002 % (20ppm CO to 1% Co<sup>2</sup>). It is advisable to have a high sample of CO<sup>2</sup> as this will improve the accuracy of the test. If you have less than 1.0% CO<sub>2</sub> the analyzer may give false results due to the accuracy of analysers reducing at low CO<sub>2</sub> levels.
2. The second test is the room centre CO test. You should stand in the room centre with the probe at waist height and read the level of CO; this should be no more than 9ppm over ambient peak. Please record these readings on the customers guarantee card.

Our flueless fires also contain the following safety devices an ODS (Oxygen Depletion Sensor) and FSD (Flame Supervision Device).

## **14. Gas rating of Burley Flueless Appliances**

Burley's Flueless Gas Appliances are all gas input rated in the factory and undergo further line tests for combustion, sooting and visual performance. For Installers who wish to gas input rate appliances we need to establish tolerances for pass and fail.

### **Manufacturers Tolerances**

The Heat Input on appliances can be expressed as either a Nett or a Gross figure. When the installer is gas rating from the meter they will be using gross heat input which is 10% higher than Nett. This conversion has to be taken into account if the manufacturer has quoted a nett figure.

The manufacturer also has to account for production tolerances on pipes, injectors, valves etc and is allowed a further +/-5% tolerance on the maximum rate.

### **Burn Down**

Cold appliances generally allow a greater rate of gas to pass through them and once the appliance warms the gas density alters and causes the rate to reduce to the figure stated. This is known as Burn Down.

Manufacturers carrying out their technical tests allow appliances to be fully warm and burn down before taking readings and this is typically after 1 hour. Some appliance manufacturers quote a 'cold' figure for the gas rate so that installers can measure this immediately.

### **Installer Tolerances**

It is important to take a gas rate test over a reasonable period of time so that the capacity of the meter is used. On low Input appliances such as our flueless this is even more critical because uncertainties can creep in. It is worth measuring over a 5 minute period to make sure.

It is also important to get your inlet pressure to 20mBar for natural gas, 28/30mbar for butane/propane & 37mBar for propane.

In a gas appliance factory compensation is also made for variations in

- % Saturation of Gas
- Variation in Calorific Value
- Variation in Gas Density
- Gas Temperature
- Gas Pressure
- Atmospheric Pressure
- Meter Calibration
- Stopwatch Calibration.

In the home it is not possible to correct for these therefore an uncertainty factor needs to be built into all measurements.

Currently Gas Safe™ (formerly CORGI) does not quote a figure on this uncertainty but the measured gas rate could vary by +/-5%.

### **Conclusion**

In adding all the variables together,

- an appliance quoting Gross Heat Input could be anything from +/-10% of the quoted heat input
- An appliance quoting Nett Heat Input could be anything from 0% to +20% of the quoted figure when measured as a Gross figure.
- If the appliance is cold anything up to a further 10% error could be expected and we don't quote these figures because they change rapidly.
- It is usually impractical to rate an LPG appliance unless fitted onto a bulk tank or similar supply.

## **15. Points to Note Regarding the Catalytic Convertor**

- If the customer smokes tobacco products, lives on a busy road or is cooking with a gas oven/hob at the time of testing you must ensure that an ambient CO reading is taken before lighting the fire and attempting a reading.
- *Does the catalytic convertor need replacing?* The catalytic convertor does not need replacing unless it has become physically broken or the combustion test shows deterioration in performance over time. To constantly test the performance of the catalytic converter, our laboratory has been running appliances eight hours per day, five days per week, for up to seven years. Periodically we send catalytic converters back to the manufacturer for testing. After the equivalent of 30 years of use, the catalytic converter is as efficient as it was when brand new. Burley manages to achieve this by designing the fire to ensure that the catalytic converter is in exactly the right position for long life and maximum efficiency. (For other makes of fire please consult the relevant manufacturer). Only use replacement catalyst supplied by Burley.
- If you or the customer detects any odours from the fire please remember that the catalytic convertor is not an air filter and does not remove smells. The linings in the fire can absorb household smells and in turn these smells get emitted when the fire is lit, especially if the fire is used in an enclosed space for a period of time. If this is the case we recommend that the fire is run on maximum for at least 5 hours with the doors and windows open. This should be done at least twice a year, preferably in the spring and autumn or at any time they notice a smell.
- We do not advise the burning of wax candles within 1 metre of the fire. Wax particles can become airborne and deposit and solidify in the fire causing potential combustion problems.
- The catalyst can also be affected by airborne paint smells and vapours from some plug in air fresheners. The fire must be removed or sealed if you plan to decorate anywhere in the house. If you can detect smells from the fire carry out the burning off procedure as above.

**Further information regarding the catalytic convertor and Flueless fires in general can be found on our website [www.burley.co.uk](http://www.burley.co.uk)**

## **16. Burley Appliances Ltd - Domestic Guarantee Conditions**

We pride ourselves on the quality of service we deliver to our customers and all Burley Appliances' products carry a fully inclusive 12-month parts and labour guarantee. This guarantee is extended by another 12 months free of charge provided that your appliance is registered with us within two weeks of installation and that it is serviced by a Gas Safe™ registered installer (formerly CORGI) at the end of the first year. What the guarantee cannot cover is problems caused by incorrect installation or servicing, or any work carried out by non- Gas Safe™ registered installer (formerly CORGI).

We undertake that if within 12 months of the date of purchase, your fire or any part thereof is proved to be defective by reason of faulty workmanship or materials, we will at our discretion repair or replace the same free of any charge for labour, materials or carriage subject to condition that:

- All gas appliances are installed to the latest Gas Installation regulations by a qualified Gas Safe™ registered installer (formerly CORGI) and connected to the correct gas type and pressure as stated on the rating plate attached to the equipment.
- The fire is fitted in a room with the following minimum dimensions 2.5Kw = 30m<sup>3</sup> / 3.5Kw = 40m<sup>3</sup> / 4.2Kw = 50m<sup>3</sup>
- A wall vent is installed not less than 1 meter away from the fire allowing 100cm<sup>2</sup> of free air.
- You have the fire serviced by a Gas Safe™ registered installer (formerly CORGI) within the first year (as with all gas products, all gas appliances must be serviced every year).
- The appliance has not been subject to misuse, accident, or repaired or fitted by anyone other than a Gas Safe™ registered installer (formerly CORGI) or our own engineer.
- The appliance has been used solely for domestic purposes and is on domestic premises i.e. not for commercial or trade use.
- The appliance has been used solely in accordance with the instruction book.

Any in guarantee work carried out by Burley Appliances will be charged for if the fault is caused by incorrect pressure or gas, incorrect installation, operator error, neglect or abuse.

**All guarantee cover is instantly and permanently cancelled if a non- Gas Safe™ registered installer (formerly CORGI) carries out any installation or servicing.**

### **Exclusions**

This guarantee **does not** cover:

- Damage resulting from external transportation, improper use or neglect, the replacement of any light bulbs or removable parts of glass or plastic.
- Costs incurred for calls to put right an appliance, which is improperly installed.
- Appliances that are the subject of rental agreements.
- EC Countries - the standard guarantee is applicable but is subject to the owner's responsibility and cost, to ensure the appliance meets the standards set by the country to which the product is taken.

**Any appliance or defective part replaced shall become the Company's property**

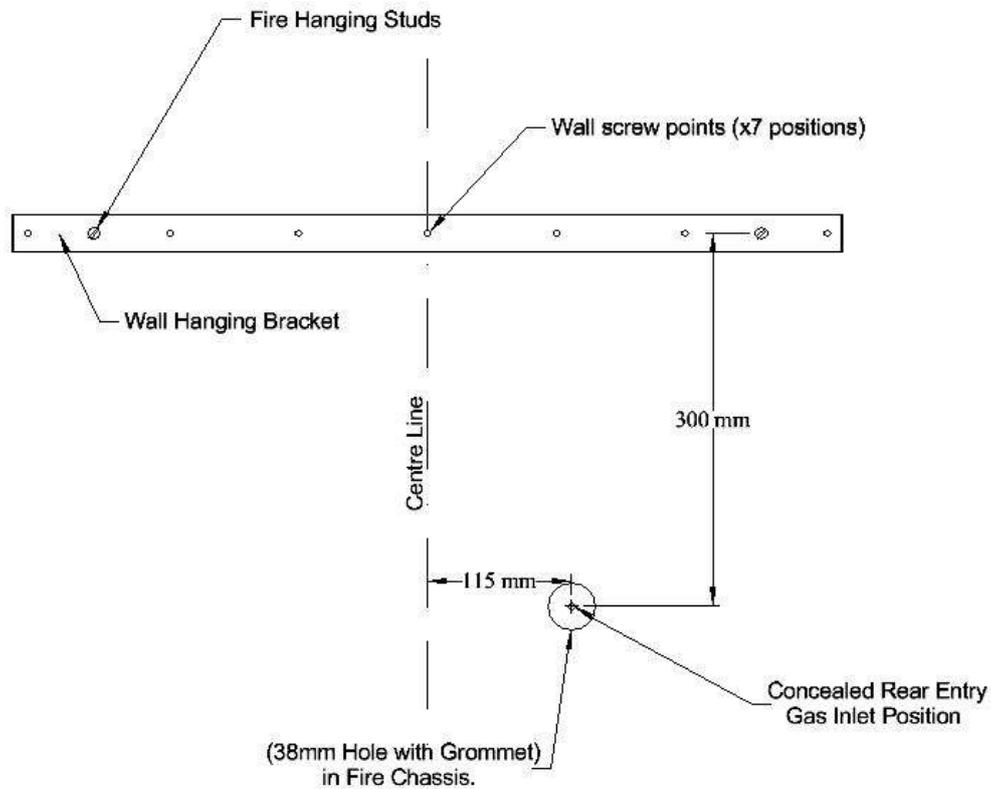
**Service Calls are made between 09.30 am and 04.30 pm Monday - Friday.**

**This guarantee is in addition to your statutory and other legal rights.**

**Proof of purchase will be required as will be a copy of the Gas Safe™ registered (formerly CORGI) installer notice.**

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## Wall Bracket & Gas Inlet Position



### Disposal



#### **Recycling Information:**

The metallic & glass parts of the appliance & its packaging should be sorted for environmental-friendly recycling.



**WEEE:** Dispose of electrical equipment in an environmentally correct manner.



When disposing components containing Refractory Ceramic Fibres (RCF), we recommend that the items are not broken up, but are sealed within heavy duty polythene bags, and clearly labelled as RCF waste. RCF waste may be disposed of in suitably licensed landfill sites.



Burley Magiglo fires are protected by  
UK patents 2193802, 2240620 and 2256920  
Other Patents Pending



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