Phantom 500 Shelf Burner

- Silver Birch with Pebble
- Log with Pine Cones
- Hole in Wall Decorative Gas Fire Burner



Installation and Users Instructions

These instructions should be read by the installer before installation and then should be handed to the end user when the installation is complete.

This is an official requirement and is the responsibility of the fitter of this appliance.

Having installed the appliance, the installer should take the necessary steps to ensure that the user fully understands how to operate the appliance and is also made aware of the fire's basic cleaning and maintenance requirements.

Legendfires

SECTION	PAGE	
Notes for the Installer and End User	4	
Installation Requirements	5	
Installation Procedure	8	
Commissioning	8	
Technical Data	9	
Replacement Parts	9	
Trouble Shooting (GAS SAFE Engineer Only)	9	
Remote Control Component Layout	10	
Wiring Diagram	11	
Fault Finding Table	12	
User Instructions	13	
Cleaning and Maintenance		
Changing Components		
Ceramic Type 1 - Layout Instructions	15	
Ceramic Type 2 - Layout Instructions	17	
Ceramic Type 3 - Layout Instructions	19	
Ceramic Type 4 - Layout Instructions	21	
Guarantee	23	
Trouble Shooting (User)	23	

THIS APPLIANCE IS INTENDED FOR DECORATIVE PURPOSES

This appliance has been designed, tested and manufactured to the European Standard EN509 relating to Decorative Gas Appliances and **must** be installed by a qualified GAS SAFE Registered Installer in accordance with the Gas Safety (Installation and use) regulations 1994 and all other relevant standards.

This appliance must be connected in accordance with the National Regulations. The appliance must be sealed into a non-combustible fireplace (Fig. 2) whose only opening must be through a Class I (7" or 175mm diameter) or Class II (5" or 125mm diameter) chimney / flue of at least three metres in height.

Before installation, ensure that the local conditions, (identification of gas type and pressure) and the adjustment of the appliance are compatible.



Allow 150mm for clearance 468 mm → 468 mm → 175 mm -

NOTES FOR THE INSTALLER AND END USER (CONTINUED)

A purpose built enclosure with an optional gather is available from Legend Fires.

NOTE: If a separate enclosure is to be used, a larger cut-out will be required - see instruction sheet supplied with the enclosure.

An air vent is not normally required for this application because its input does not exceed 7kW. We recommend that the chimney/flue is swept prior to installation of this appliance and that any flue restrictor or damper plate should be removed or fixed in the open position. The chimney/flue must always generate a positive up draught to ensure safe operation.

The installer must then establish that all the products of combustion are entering the flue within five minutes of lighting from cold. This can be verified by traversing the canopy with a lighted smoke match (see 'Spillage Test' page 6).

An isolation valve is fitted within the appliance. When closed, this will allow the complete burner and control tray to be disconnected and removed for maintenance or repair in accordance with national regulations.

The gas supply should be provided by a semi rigid pipe with an 8mm diameter and should be no longer than 1.5 metres in length.

NOTE: When the gas supply pipe is passed through masonry or other brickwork always ensure that the end of the pipe is covered to avoid any debris passing through into the appliance controls.

The appliance is fitted with an Oxygen Depletion Sensor (ODS) that monitors the room for products of combustion. If products are detected, the ODS will automatically shut down the appliance. If this situation arises, re-light the appliance, referring to the user instructions (page 13). If shut down re-occurs, a qualified person must be called to thoroughly check the appliance. The spillage monitoring system (ODS pilot) must not be put out of operation or be tampered with or adjusted by either the installer or the user. If the unit is found to be at fault it should be replaced with the manufacturers original replacement parts.

INSTALLATION REQUIREMENTS

This appliance must only be installed in Great Britain or Ireland.

1. This fire is a natural gas appliance and has been designed for use with the following applications:

a) **Class I** - Conventional brick or stone chimney as used for a solid fuel fire with a cross sectional dimension of 225mm x 225mm (9" x 9") or a lined flue with a minimum diameter of 175mm (7"), with the fireplace components conforming to BS1251, or a builders opening a minimum of 340mm high and 620mm wide with a depth of 380mm. To obtain this depth it would not normally be necessary to remove the chair brick. Any permanent flue restrictions or variable dampers are to be removed or locked in the fully open position. The chimney should also be swept prior to installation(Fig.3).

b) **Class II** - A purpose built enclosure made to the requirements of BS715 with an insulated flue having a minimum diameter of 125mm (5") and a minimum effective overall height of 3 metres (10') (Fig.3).

NOTE: If the flue box is to be used with an existing brick or stone chimney, a 125mm (5") minimum diameter flue liner conforming to BS715 may be used.



2. The size of the fire opening is governed by the length and diameter of the flue. Providing the above opening sizes and flue class are adhered to, additional ventilation is not required. However some changes in fireplace opening heights and widths can be accommodated using the graph below (Fig. 4).



chimney height 4.5m - use 0.305m (12 inch) diameter flue

FLUE FLOW TEST

A flue flow test (smoke test) is carried out to check the effectiveness of the flue and to ensure that there is no leakage into another part of the premises (including any loft), or as appropriate other adjoining premises (this is particularly important where a number of chimneys combine into a multiple stack).

The flue flow test should be carried out using a suitable smoke pellet which the pellet manufacturer claims to generate 5m³ of smoke in 30 seconds burn time.

These gas fires should have the flue flow test carried out with the appliance in position but not connected to the gas supply so that the smoke test can be carried out with representative flue flow conditions.

A warm flue will be more effective than a cold flue. If the flue is reluctant to draw, which can be initially assessed by lighting a smoke match at the intended position of the appliance flue connection, introduce some heat into the flue for a minimum of 10 minutes using a blow torch or other means.

Other factors, such as weather conditions and a combination of materials used to construct the flue can all influence the flue draught. The pre-heating process may require as much as half an hour before the flue behaves satisfactory as a blow torch does not represent the volume of heat consistent with the normal appliance operation.

A Flue Flow Test should be checked as follows:

- 1. Carry out those visual checks as indicated previously, and continue only if satisfactory.
- 2. Establish that an adequate air supply is available for the combustion of the appliance
- 3. Close all doors and windows in the room that the appliance is to be installed.
- 4. Light a smoke pellet at the intended position for the appliance. Place the inset fire case into position.
- 5. The test is satisfactory if
 - there is no significant escape of smoke from the appliance position.
 - there is no seepage of smoke over the length of the flue.
 - smoke is discharged only from the correct terminal.

VENTILATION

No special ventilation bricks or vents are required in the room containing the appliance, providing that normal adventitious room ventilation exists. The installer must determine this by carrying out a spillage test.

SPILLAGE TEST

To check for satisfactory clearance of products of combustion, close all doors and windows and leave the fire burning for five minutes. Insert a lit smoke match on a vertical plane 50mm down, 50mm inside the canopy opening. All the smoke must be drawn into the flue. If spillage occurs, allow a further ten minutes and repeat the test. Should spillage still occur turn the appliance off and seek expert advice.

To continue the test: If an extractor fan is situated in the room the test should be repeated with the fan running. If there is a connecting room with an extractor fan the test should be repeated with all the doors to that room open and the extractor fan running.



A small cutout of not less than 1500mm² should be provided into the lower burner void i.e. this can be cut into the back of the lower slip and in turn through the front blockwork. See page 4 Fig. 1.



GAS INLET should also be sealed from flue

INSTALLATION PROCEDURE

1. Carefully lift the appliance out of the packaging taking care not to damage the ceramic components in the separate carton.

2. Remove the four screws securing the black decorative panel to the controls tray.

3. Remove the burner and carefully lift the reflector panel out of the controls tray. (Fig. 5)

4. Before making the final connection, thoroughly purge the supply pipe to clear any foreign matter, i.e. masonry dust etc, as this could lead to blockages in the control valve and/or pilot assemblies.





Black Decorative

Burner

Reflector

Panel

Panel

COMMISSIONING

- 1. Unscrew the pressure test point sealing screw (Fig. 6) and fit a manometer.
- 2. Replace the burner for initial ignition test.
- 3. Consulting the user instructions (page 13) Ignite the appliance and turn to the high position.
- 4. Take a pressure reading and consult the technical data table below to establish the correct working pressure.
- 5. Once the pressure has been checked and verified, turn off the appliance and allow the burner to cool.
- 6. Remove the burner and replace the reflector panel into the controls tray.
- 7. Re-fit the burner into the controls tray.

8. Locate the black decorative panel onto the controls tray and secure using the four screws.

9. Fill the burner with the vermiculite supplied.

10. Tease out the strands of embaglow and place onto the burner, ensuring they do not come into contact with the pilot.

11. Consult the ceramic component set up diagrams (pages 15 - 22) and fit the ceramics as per the instructions.

NOTE: Ensure that the line of sight for the infrared sensor is not obstructed by ceramics.

10. Carry out a Spillage Test (page 6).



Gas Type	Natural Gas (G20) Cat I _{2H}
Gas Connection	8mm
Number of Injectors	One
Injector size	Stereomatic 2.1mm Single Point
Control Max Operating Temperature	80°c
Inlet / Burner Pressure Cold	20 mbar
Heat Input (Gross)	6.9 kW
Weight	9 kg

REPLACEMENT PARTS

1. **Loose ceramics** - The ceramics supplied with this appliance can be replaced at service intervals depending on their condition. If the ceramics do require replacement, the consumer can do so provided that the Ceramic Component Layout Instructions (pages 15 - 22) are adhered to. Under no circumstances should additional/extra ceramics be added. Only genuine Legend replacement parts should be used.

2. Oxygen Depletion Sensing Pilot - In the unlikely event of a pilot failure, the pilot assembly should only be replaced by a GAS SAFE Registered Engineer. The user must not carry out this work.

3. Gas Control Valve & Receiver Unit - In the unlikely event of control tap failure, the assembly should only be replaced by a GAS SAFE Registered Engineer. The user must not carry out this work.

4. **Main Injector** - In the unlikely event of main injector failure, the fitting should only be replaced by a **GAS SAFE Registered Engineer**. The user must not carry out this work.

TROUBLE SHOOTING (GAS SAFE ENGINEER ONLY)

1. The Piezo will not spark.

Check:

If the electrode is cracked or broken - Replace pilot assembly. If the HT lead is shorting out on the burner body - Locate where the short is occurring, isolate and/or re-route the lead. If the HT unit/lead is faulty - Replace as necessary.

2. The Pilot will not light (but the Piezo is sparking). Check: If the gas is reaching the pilot - check

If the gas is reaching the pilot - check joints and connections.

If the pilot jet is blocked - Inspect and clean.

If the pilot is still not passing gas - Replace the pilot assembly.

3. The Pilot lights but goes out when the control knob is released.

Check: If the Thermocouple is loose/disconnected at the control valve - remake the connection. If the Thermocouple is faulty - Replace.

- If the Thermocoupie is faulty Replace.
- If the Electro magnetic valve is faulty replace valve.

4. The Burner will not light readily from the pilot.

Check: If the coals are obstructing the pilot to burner path ie. Are the coals blocking the opportunity for the pilot to light the burner - Relay the coal set as per Ceramic Component Layout Instructions. (pages 15 - 22).

5. The fire makes a roaring noise when lit.

Check: That the front coal is seated correctly and the pilot hole is positioned correctly over the pilot assembly.

IF ANY PART OF THE PILOT ASSEMBLY IS SUSPECTED AS BEING FAULTY THE COMPONENT MUST BE REPLACED.

6. The flames appear blue (after the fire has fully warmed up). The coals/ceramic liners have soot deposits.

Check: That the coals have not moved from the original setting - Relay the coals as per the Ceramic Component Layout Instructions (pages 15 - 22). There may be too little/much ventilation into the room. Identify and then take steps to rectify.

7. The flame picture is low on the high setting.

Check: For any partial blockages - Check all obvious locations for debris in pipe work and fittings. Inlet gas pressure, both standing and working gas pressure - Identify problem and take necessary steps to rectify. **Note**: Flame pattern improves with use.

8. Fumes enter the room when the fire is operating.

Check: Why the chimney is not drawing all the products of combustion up the flue, identify where the problem lies and rectify, otherwise disconnect the fire and seek professional guidance.





Observed Problem	Possible Cause	Remedy
No ignition; no tone; valve pulses twice then shuts off:	1. Receiver	1. Replace receiver
No ignition; One 5 second continuous tone (7 short beeps might be heard prior to the 5 second tone):	 Loose wire Receiver Bent pins on 8 wire connector Valve 	 Secure wire Replace receiver Straighten pins on 8 wire connector Replace valve. Do not overtighten the thermocouple interrupter. Finger tight + ¹/₄ turn
No pilot flame and control continues to spark	 Air in supply pipe Thermocouple circuit wired incorrectly No spark at pilot burner Valve Over tightened thermocouple interrupter Receiver 	 Purge the line or start ignition several times Check polarity of thermocouple wires Check manufacturer's instructions for pilot setup; check wiring connection. Check for spark in location along cable Replace valve. Do not overtighten the thermocouple interrupter. Finger tight + 1/4 turn Replace valve and thermocouple interrupter Replace receiver
Pilot is lit and sparking stops. Valve shuts off after 1060 seconds.	 Not enough voltage generated from the thermocouple or too much resistance in the circuit Thermocouple Low inlet pressure to valve Valve 	 Replace thermocouple Confirm sufficient inlet pressure to the valve Replace valve. Do not overtighten the thermocouple interrupter. Finger tight + ¹/₄ turn
3 short beeps while the motor turns	1. Batteries are low	1. Replace batteries (quality alkaline recommended)
Pilot flame lights but there is no main gas flow	 Valve turned down to pilot flow Low inlet pressure to valve Valve 	 Turn flame to high fire by pressing up button on remote handset Confirm sufficient inlet pressure to the valve Replace valve. Do not overtighten the thermocouple interrupter. Finger tight + 1/4 turn
On first start up, no clicking sound from pilot	1. Embaglow shorting out igniter	1. Remove embaglow from igniter
No transmission - motor does not turn	1. Dead batteries	1. Replace batteries (quality alkaline recommended)

USER INSTRUCTIONS

THIS APPLIANCE IS INTENDED FOR DECORATIVE PURPOSES.



OPERATION AND CONTROLS

It is most important that the operator of this gas appliance has fully read and understood all of the operating, cleaning and maintenance procedures as laid out in these instructions.

Fitting the handset battery

1. Remove the battery cover on the rear of the remote handset and insert a 9 volt PP3 size battery. Ensure that the connector is fitted correctly to the battery terminals.

2. Replace the battery cover.

Notes on using the Handset

1. When using the handset, ensure that it is pointed at the infrared receiver located on the front left hand side of the fire (Fig. 10).

2. The handset buttons must be pressed and held for about three seconds to enable the fire to register the infrared signal. When a signal is acknowledged by the fire, a "beep" will be heard. The red LED on the handset will illuminate when an infrared signal is being transmitted.

Lighting the Fire

1. To light the fire, press the \varkappa button and the \bigwedge button at the same time until the fire responds with a "beep".

2. The fire will then start it's lighting procedure which will take approximately 30 seconds. During this process the fire will emit a regular series of "beeps".

3. If the fire does not light or there is no response when the two buttons are pressed, press the OFF button to reset the control and start the lighting procedure again.

Adjusting the Flame Height

1. To lower the flame height, press and hold the **b** button until the flame is at the desired height.

2. To turn the main burner off and leave the pilot lit, continue to hold down the & button until the main burner extinguishes. To re-light the main burner press and hold the \bigstar button and & button together until the flame is at the desired height.

Turning the Fire Off

1. To turn the fire off completely, press the OFF button.

WARNINGS:

Never throw any type of rubbish on or otherwise disturb the fuel bed.

Any alteration to this appliance including its ceramic components may render it inoperable and unsafe.

ALWAYS run this appliance on the high setting for the first 30 minutes (minimum) - Failure to do this may result in poor combustion and excessive sooting.



It is the users responsibility to ensure that the appliance is kept in a clean serviceable condition.

1. **Ceramic Components and Fuel Bed** - Debris from any source should be removed with a soft brush. Please ensure that any debris including soot deposits are removed from the appliance and not left on the fuel bed. It is recommended that the user should, on a regular quarterly basis, carefully remove all ceramic components and thoroughly clean the burner and the pilot assembly (Fig. 11). Any build up of debris in this area could affect the operation of the appliance



NOTE: It is common to find surface cracks in the ceramic components. This is due to the expansion and contraction of the ceramic fibres caused by the intense heat that the burner generates. The cracks will not affect the safe operation of this appliance. However great care must be taken when handling the ceramic components as they will break if handled incorrectly. Do not use a vacuum cleaner to clean the ceramics.

SAFETY WARNING - This appliance has a naked flame and as with all heating appliances a fireguard should be used for the protection of children, the elderly and infirm. Fireguards should conform to BS 6539 (1984 Fireguards for use with solid fuel appliances). This fire is not fitted with an integral guard. In normal use consideration may be given to the use of a fireguard confirming to BS 6539, such that the approach to the naked flame is minimised.

CHANGING COMPONENTS

Note: Always disconnect the battery pack before carrying out any work on the controls assembly.

Control Unit Batteries

1. Open the access flap located at the front left hand side of the black decorative panel (Fig. 12).

2. Carefully slide the battery carrier upwards and withdraw the battery pack.

3. Remove the small screw located on the rear of the pack to gain access to the four batteries.

NOTE: Only use good quality batteries such as Energiser.

If it is necessary to gain access to the Gas Valve, Injector and Control Unit, follow the procedure below.

1. Isolate the gas at the pressure test point elbow and undo the nut on the gas pipe.

2. Carefully lift out the control tray and turn upside down.

3. Reassemble in reverse order.





It is very important that all the ceramics are used and arranged as shown in order to achieve the desired flame picture.

It may be necessary to remove some or all of the ceramics to clean them at some time. Cleaning must only be done using a soft brush.

CAUTION: The ceramics are extremely fragile and must be handled accordingly. Gloves should be worn and any inhalation of dust should be avoided. The ceramics must be kept away from children at all times. Never put additional ceramics on the fire. Never use ceramics other than those originally supplied, or genuine Legend Spare Parts.

IMPORTANT NOTICE: Always set up the ceramics on the periphery of the top panel. NEVER place the pieces directly over the mesh/ventilated areas as this will cause overheating and subsequent damage to components. Failure to follow this instruction may affect the customer warranty.

1. Fill the burner with the vermiculite supplied (Fig. 14).

2. Tease out the strands of embaglow and place onto the burner, ensuring they do not come into contact with the pilot (Fig. 15).



Fig. 18

3. Locate the log and pine cone pieces in order as shown in Figs. 16 to 22.









Fig. 21

Fig. 19

Fig. 22

Fig. 20





Make any adjustments necessary to achieve even gaps as this will help in giving a well balanced flame picture and an even glow. After running the fire for 30 minutes, it may be necessary to adjust the ceramics with tongs.





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1. Fill the burner with the vermiculite supplied (Fig. 24).

2. Tease out the strands of embaglow and place onto the burner, ensuring they do not come into contact with the pilot (Fig. 25).

3. Position the pebbles around the burner, ensuring that none come into contact with the pilot and all the gaps are even (Fig. 26).

4. Locate the log and pine cone pieces in order as shown in Figs. 27 to 31.



Fig. 28



Fig. 29





Fig. 30

Fig. 31



Fig. 32

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1. Fill the burner with the vermiculite supplied (Fig.

2. Tease out the strands of embaglow and place onto the burner, ensuring they do not come into contact with



Fig. 36

3. Position the pebbles around the burner, ensuring that none come into contact with the pilot (Fig. 36).



Fig. 37



Fig. 38



Fig. 39

Make any adjustments necessary to achieve even gaps as this will help in giving a well balanced flame picture and an even glow. After running the fire for 30 minutes, it may be necessary to adjust the ceramics with tongs.



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1. Fill the burner with the vermiculite supplied (Fig. 41).

2. Tease out the strands of embaglow and place onto the burner, ensuring they do not come into contact with the pilot (Fig. 42).

3. Locate the log and pine cone pieces in order as shown in Figs. 43 to 48.



Fig. 45



Fig. 46



Fig. 47



Fig. 48



Fig. 49

Make any adjustments necessary to achieve even gaps as this will help in giving a well balanced flame picture and an even glow. After running the fire for 30 minutes, it may be necessary to adjust the ceramics with tongs.

GUARANTEE



Your appliance is guaranteed for one year from proof of purchase. Should the appliance prove defective within that period we agree to repair or replace (at our discretion) the component or appliance provided that:

1. The user can produce a receipt for proof of purchase/installation.

2. The appliance has been supplied by an authorised stockist and has been installed by a qualified installer, all installation and operating instructions have been strictly adhered to.

3. No alterations have been carried out on the appliance or component parts without our written consent.

4. The appliance has not been used for any purpose other than those intended.

5. The appliance has not been damaged accidentally or due to fair wear and tear.

Guarantee claims should be made through your appliance supplier. The Guarantee is restricted to UK Mainland and is additional to your statutory rights.

TROUBLE SHOOTING (USER)

1. The Fire will not light.

If soot is present at the pilot, remove all the ceramics and thoroughly clean any debris in and around the pilot area. If the fire will still not light contact your installer.

2. The flames appear blue - excessive soot deposits.

The ceramic components need relaying (pages 15 - 22). Too much or too little room ventilation. Seek professional advice.

3. Roaring noise coming from the pilot.

4. All the Ceramic Components are discolouring.

The ceramic sets are manufactured from ceramic fibre. As these fibres are naturally white, dyes are used to give a realistic appearance. These dyes discolour after they have been subjected to intense heat. However the discolouration does not affect the operation of the appliance. The realistic appearance can be restored with the use of a good replacement dye that can be purchased from most good fireplace showrooms. Issue 9 - 9/5/12

Legendfires

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