ROBINSON WILLEY

BLACK KNIGHT 2 - Classic Collection

(GC No. 32 170 16)

Installation & Servicing Instructions

IMPORTANT - THIS FIRE DOES NOT NORMALLY REQUIRE ADDITIONAL VENTILATION INTO THE ROOM IN WHICH IT IS INSTALLED

GENERAL INSTALLATION REQUIREMENTS

In your own interest and that of safety, it is the law that all gas appliances are installed by competent persons in accordance with the current Gas Safety (Installation & Use) Regulations.

Failure to install appliances correctly could lead to prosecution.

The installation MUST be in accordance with these installation instructions, all the relevant parts of the Local and National Building Regulations or Building Standards (Scotland) (Consolidation) Regulations and the relevant recommendations of the current editions of the following British Standards:-

B.S. 5871 : Part 2.

B.S. 5440 : Parts 1 & 2.

B.S. 6891

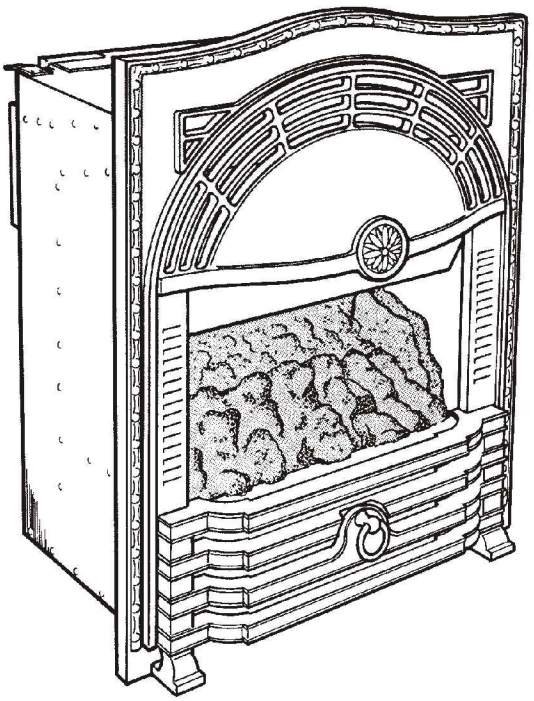
B.S. 6461 : Parts 1 & 2.

B.S. 715

B.S. 1251.

Any other relevant British Standard Code of Practice and/or Local Building Regulations.

This appliance must be installed in accordance with the rules in force. For G.B. and I.E. only.



FOR USE WITH NATURAL GAS ONLY (G20 at 20mbar supply pressure)

The Data Badge and Serial Number are located on the left hand side of the base plate.
Remove the Controls Fender to Gain Access.

PLEASE LEAVE THESE INSTRUCTIONS WITH THE USER

INTRODUCTION

No component is manufactured from asbestos or asbestos related products.

The Black Knight 2 is an open fronted, inset live coal effect gas fire. The control and burner systems are designed to give varying decorative flames at different settings. Ignition is by integral piezo spark operated by turning the control knob. The fire is fitted with combined flame supervision and oxygen depletion monitoring device (See Section 6.6). The fire is hearth mounted on a non-combustible hearth. It is suitable for use with brick chimneys and metal flues / flue boxes conforming to BS 715. The fire is for use with Natural Gas only.

1.0 TECHNICAL DATA

1.1 DIMENSIONS

(Overall)	mm
Height	620
Width	505
Depth (into opening)	300
Height to top of flue aperture	545
Forward Projection	80
Weight	37kg

1.2 Maximum Heat Input	7.0kW 23,885Btu/h	
Maximum Heat Output	3.7kW 12,620Btu/h	} Gross
Minimum Heat Input	2.25kW 7,680Btu/h	
Setting Pressure		
Cold	14.4mbar ± 1.0 (5.8in w.g. ± 0.4)	
Supply Pressure	20mbar (8in w.g.)	
Gas Rate Adjustment	NONE	
Gas Inlet Connection	Rp¼ (¼in BSP internal)	

1.3 Burner	- Front Burner	Bray AB 29012
	- Rear Burner	Bray AB 29011
	- Pilot Burner	SIT OP 9031
Injector	- Front Burner	RY 290
	- Rear Burner	N33
	- Pilot Burner	Integral Design
Ignition	- Integral Piezo Igniter	
Control Tap	- Concentric Duplex Tap with Flame Supervision Device Model No. TE/SA/2162.	

2.0 SITING GENERAL

This fire is suitable for Hearth Mounting only on a non-combustible hearth. It MUST NOT be placed directly onto a carpet or other combustible material NOR be fitted directly against a combustible wall surface. It is IMPORTANT that there is no combustible cladding on the wall area shown with the dotted lines in Fig. 1. The fire MUST stand on a non-combustible hearth at least 13mm (½ / in) thick and measuring at least 695mm (27 / in) wide by 300mm (12in) deep. Its top surface should preferably be 50mm (2in) above the floor level in order to discourage the placing of carpets or rugs over it. The fire may be fitted to a standard brick chimney 228mm x 228mm (9in x 9in) or 178mm (7in) diameter lined brick or stone flue of at least 3m (10ft) effective height. The spigot restrictor should be fitted for flues with good draught. It is also suitable for 125mm (5in) flue and flue liner of at least 3m (10ft) effective height, the spigot restrictor MUST NOT BE FITTED (See also Section 4.3). The fire is suitable for hearth / surround rated at 150°C.

A chimney previously used to burn solid fuel must be swept prior to installation.
The chimney must be inspected to ensure that:-

(a) It serves only one fireplace.

(b) It is properly sealed so that combustion products do not escape from the flueways into the room.

(c) It is not blocked by paper, rubble etc.

(d) Any restriction such as a damper, register plate, etc., must be removed or secured in the fully open position.

1. If the opening is larger than shown in Fig. 1 then it must be bricked up until the opening is a maximum of 580mm high x 457mm wide, alternatively a non-combustible infill panel may be used to achieve the required dimension.
DO NOT USE THE BACK OF A FIRE SURROUND TO ACHIEVE THESE DIMENSIONS.

2. There must be a minimum flat surface area around the fireplace opening at least 620mm high and 505mm wide to ensure a good seal. This area should be sound enough to take the rawplugs and wood screws supplied (See Section 4.2).

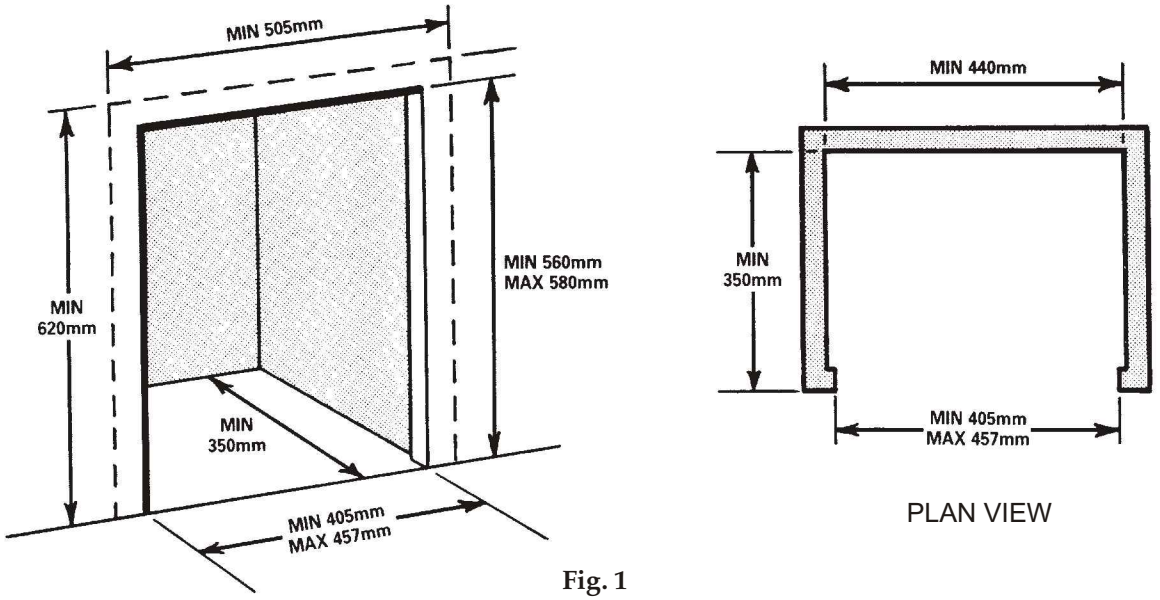


Fig. 1

3. Ensure that the base of the fireplace is level with the hearth. The fireplace floor should be reasonably flat to prevent the fire rocking.

4. The chairbrick (if present) must be removed to achieve the dimensions in Fig. 1. The back of the opening should be sound enough to take the eye-screws supplied (See Section 4.1).

5. Purpose provided ventilation bricks or additional air vents are not normally required in the room in which the fire is fitted.

6. IMPORTANT: When considering fitting any heating appliance or wallpapering a room in which one is fitted if blown vinyl or heat sensitive wallpapers are used in the vicinity of the heat source then they may become heat damaged or discoloured, especially just above the fire.

7. The fire should be installed so that no part of a combustible wall, i.e. not parts of a fire surround but a full wall at 90° to the fire is less than 500mm (20in) from the radiant source. If this is not possible the combustible side wall should be suitably protected.

8. A shelf may be fitted above the fire. The underside of a combustible shelf not more than 150mm deep must be at least 848mm from the hearth. This gives a clearance of 228mm above the top edge of the fire. For deeper shelves, add 25mm shelf height for every 25mm increase in depth.

9. Check the chimney for good draught.
Apply a lighted match, lighted paper or smoke match to the top of the opening in the fireplace. Observe if there is a definite flow into the chimney and if so proceed with the fitting of the fire. If no flow is indicated, warm the chimney for several minutes and then re-check. If any tendency to downdraught is observed a suitable terminal must be fitted and the chimney re-checked. If persistent no-flow or downdraught condition is observed DO NOT FIT THE FIRE, SEEK EXPERT ADVICE.

3.0 UNPACKING

The fire is supplied in two packs, when unpacking refer to the check list to ensure that all the components are present.

PACK 2 contains:

1. [a] A pack located in the firebox which houses:-

    (i) Front Coal Bed.

    (ii) A pair of side cheeks.

    (iii) 10 coals.

    [b] A polythene bag containing the fire fixing kit comprising:-

    (i) 2 Fixing Cables.
    (ii) 4 Eye-Screws.
    (iii) 4 Wall Plugs
    (iv) 2 Cable Adaptors.
    (v) 2 Grub Screws.
    (vi) 4 Screws (Fire Fixing).
    (vii) 4 Screws (Outer Case Fixing).
    (viii) 3 Screws (spigot restrictor).

2. Fire body with the following items already fitted in the fire:-

    (a) Rear Coal Bed.

    (b) Centre Coal.

3. The spigot restrictor taped to the top fitment.

PACK 1 contains the outer case including the fender.

Remove the contents carefully. Special care should be taken when handling the coals and fragile components. Check that all the listed parts are there and are in good condition.

Keep these to one side and in a safe place.

4.0 INSTALLATION OF FIRE

There are two methods for securing the fire to the wall which are:-

1. Fixing by tension cable.

2. Screwing the fire directly to the wall.

METHOD 1 is recommended where drilling holes in the front surface of the fireplace surround is unacceptable or otherwise risky, for example, marble surround.

IMPORTANT: If the surface of the fireplace is uneven it is necessary to ensure that a positive seal can be obtained between the fire and the wall.

Before fitting refer to Section on Gas Connection.
When fitting a fire with a concealed gas connection it is necessary to prepare the pipework prior to fitting the main firebody.

FIT SPIGOT RESTRICTOR IF APPLICABLE (Fig. 2)
Locate the restrictor over the debris shield and secure with the 3 screws supplied.

4.1 METHOD 1 - Cable Fixing

FITTING MOUNTING EYE-SCREWS
Mark the position for eye-screws in the back of the opening according to the dimensions in Fig. 3. Drill 6mm holes and plug the holes with the wall plugs. Fix the eye-screws to the holes.

First remove the burner tray by undoing the four securing screws. Insert the free end of each cable through the upper hole in the fire and then through the eye-screws in the opening(refer to Fig. 3). Thread the free ends of the cable through the holes in the cable tensioning bolts from the rear and insert the fire into the opening in the fireplace surround. The fire should be inserted so that the seal on the back of the fire is compressed against the surround face. Any visible gaps indicate a deviation from flatness of the surround face and MUST be corrected. Pull the cable taut each side of the fire and insert tha cable adaptors over the ends of the cable (Fig. 3). While keeping the cable taut slide the adaptor against the tensioning bolt and tighten the grub screw to lock the cable. Using a spanner unscrew each tensioning bolt by about 20mm to tension the cable. Prevent the cable adaptors from rotating while unscrewing the tensioning bolts. Refit the burner tray.

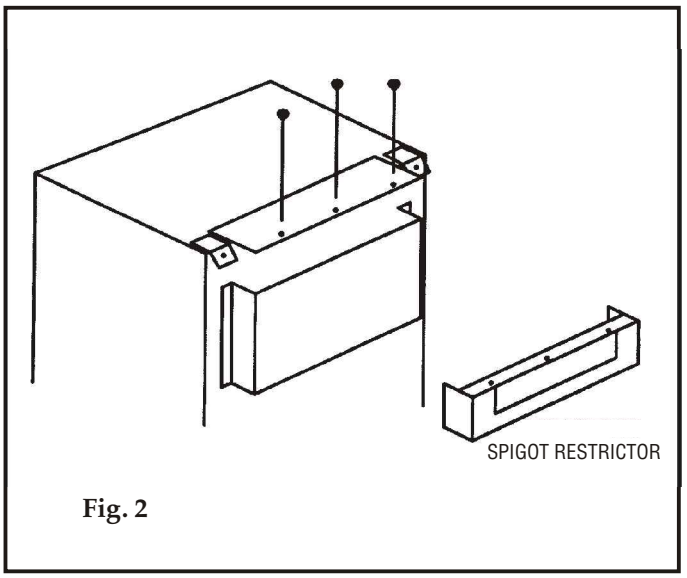


Fig. 2

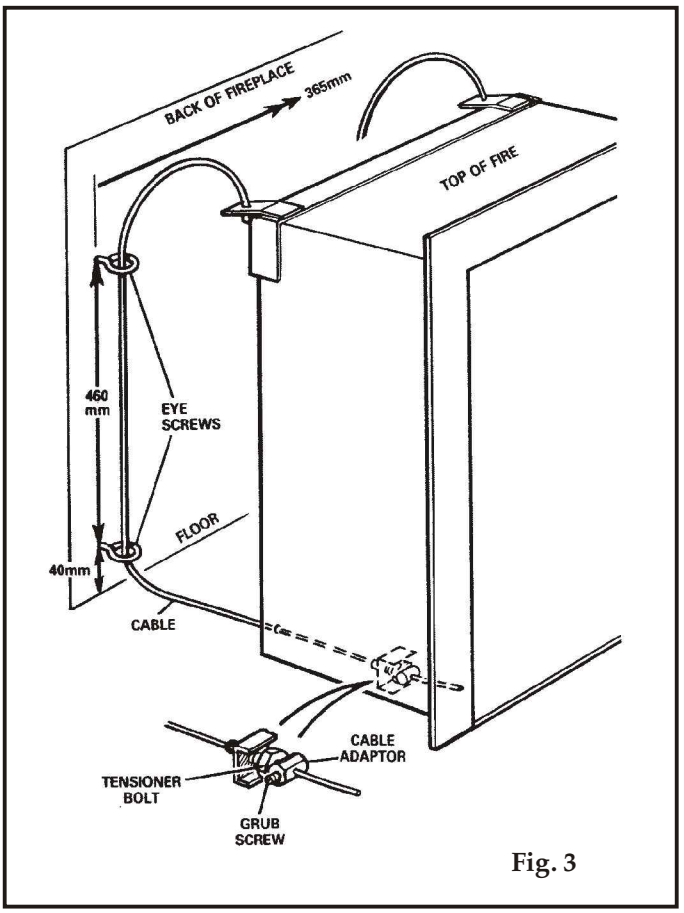


Fig. 3

4.2 METHOD 2 - Front Fixing to Fireplace Surround

Mark the positions of the fixing holes on the front face of the fireplace surround using the fire as a template. Drill 6mm holes and plug the holes with the wall plugs supplied

Insert the fire into the opening in the fireplace surround until the seal on the back of the fire is compressed against the surround face at every point. Note that any visible gaps between the surround face and the seal indicate a deviation from flatness on the surround face and MUST be corrected. Screw the fire to the wall.

4.3 Installation in a metal flue box (optional extra)

The fire can be installed in a Selkirk Box Product Code 0705007. The box has 175mm spout for direct connection to 175mm diameter Selkirk SM chimney system. The spout may be adapted to take 125mm diameter Silkirk IL flue system or flue liner complying to BS 715 by using Selkirk adaptor 175mm/125mm Product Code 0409605.

When installing Black Knight to the Selkirk Box use the fixing kit supplied by Robinson Willey as an optional extra Part No. 992512 (G.C. No. 159 576) and install the fire as detailed in the Instructions with the kit.

IMPORTANT: The spigot restrictor must not be fitted if a 125mm diameter flue is to be used.

4.4 GAS CONNECTION

NOTE: The appliance must be connected to gas with rigid or semi-rigid tubing. A means of isolating the gas supply must be fitted upstream of the appliance inlet to facilitate connection and subsequent servicing. The supply pipe to the fire should be installed so that it is easy to remove prior to removal of the fire from the opening during servicing.

If a concealed connection from within the fireplace is required then, before the appliance is fitted into the fireplace, it will be necessary to extend the supply line so that it will project through the sealed opening situated at the back of the firebox to the appliance inlet elbow.

Access may be improved by undoing the four front screws and withdrawing the burner assembly tray.

4.4.1 Concealed Connection

The dimensions below indicate the required position of the supply pipe to enable it to pass through the aperture in the fire back. Refer to Fig. 4.

Dimension A = 106.5mm
Dimension B = 302mm
Dimension C = 19.5mm

(a) Make connection from concealed point to finish in the plane of fixing of the fire and 19.5mm above hearth level.

(b) Ensure that there is a union connection at this point. The inlet elbow provided with the fire should be fitted to the supply.

(c) Ensure that a service cock (which may be in the form of a union restrictor elbow) is provided for isolation of the fire for servicing at a later date.

(d) The pipe run from the supply line up to the rear opening in the fire box must be kept clear of the area which will be taken by the box when it is installed

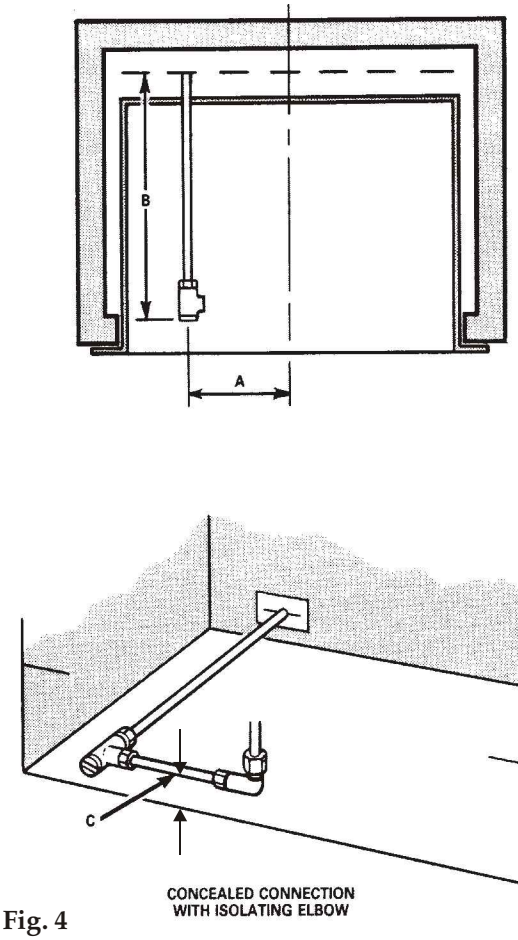


Fig. 4

4.4.2 Connect Gas to Supply

Extend the gas supply to the gas inlet located at the left hand side of the fire. Connect the fire to the gas supply via the union elbow. For right hand connection, route the supply pipe behind the gas control tap.
The union elbow has Rp¼ (¼in B.S.P. internal) thread for supply pipe.

4.4.3 Test for Gas Soundness (Refer to BS 6891 : 1988)

The gas installation, including meter, should be inspected and tested for soundness and purged.

4.5 INSTALL FUEL EFFECT COMPONENTS

The fuel effect components comprise (Fig. 5A):-

1. Rear Coal Bed.

2. Centre Coal.

3. Side Cheek LH

4. Side Cheek RH

5. Front Coal Bed.

6. 10 Coals.

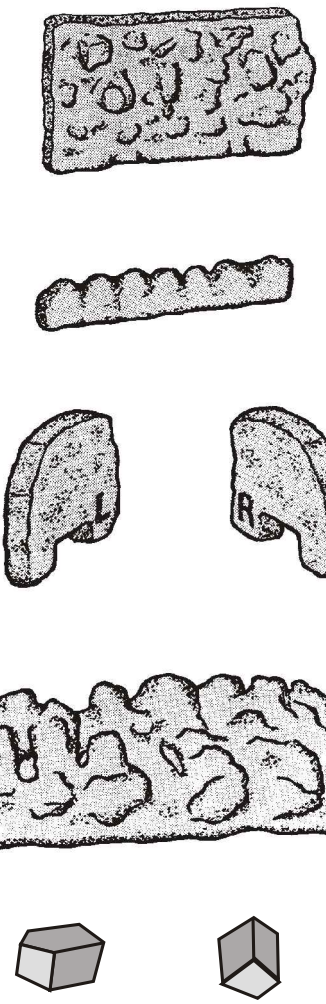


Fig. 5A

Correct arrangement of the coals is essential to ensure safe operation of the fire.
DO NOT INSTALL THE FIRE WITH BROKEN OR MISSING COALS.
For replacement of Rear Coal Bed and Centre Coal refer to Section 7 of the Servicing Instructions.

1. Locate the side cheeks in their brackets on the sides of the firebox as shown in Fig. 5B.

2. Place the front coal bed centrally in the firebox. The back end should rest on the rear burner brackets. Slide the bed forward to ensure that the front end rests against the front rail (Fig. 6A).

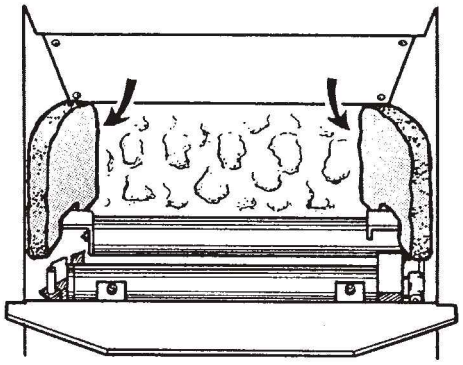


Fig. 5B

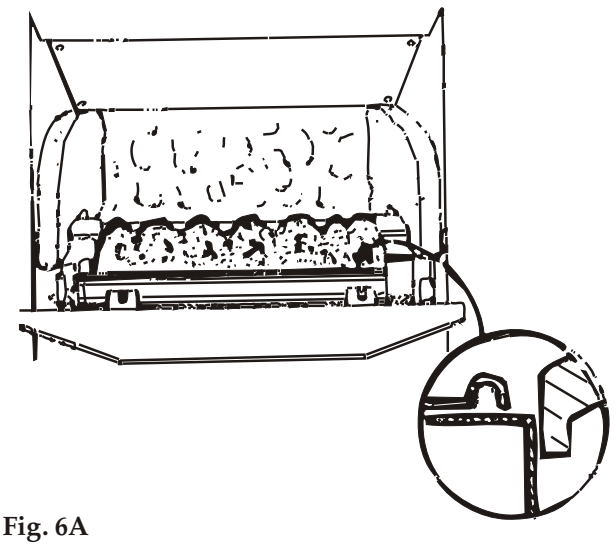


Fig. 6A

3. Locate 4 coals on the front recesses of the front coal bed as shown in Fig. 6B. Wherever possible place the coals with the decorative faces forward. Ensure that the coals are stable and are not likely to fall off.

4. In a similar manner place the remaining 6 coals above and behind the raised portions of the rear of the front coal bed as shown in Fig. 6C. Ensure that there is adequate space between the rear coals and the rear coal bed for flames to pass through.

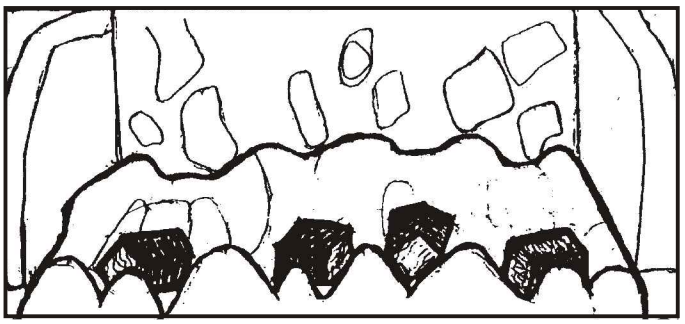


Fig. 6B

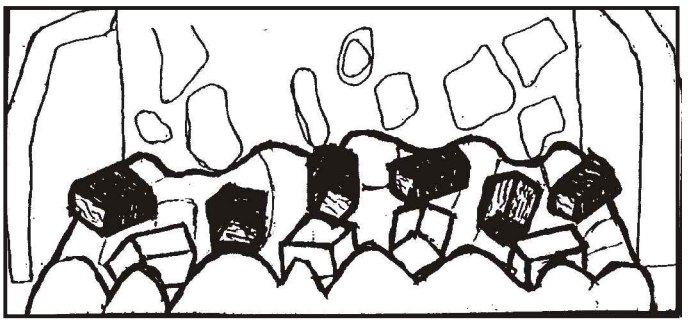


Fig. 6C

4.6 CHECK GAS PRESSURE

Remove the pressure test point sealing screw located on the right hand side of the fire and connect a pressure gauge. Light the fire (Refer to Users Instructions).
Turn to the HIGH position. Check that the gas pressure is 14.4mbar ± 1mb (5.8in w.g. ± 0.4). Turn the fire off and disconnect pressure gauge. Replace the pressure test point screw. Relight the fire and test for gas soundness around the sealing screw using a suitable leak detection fluid.

4.7 FIT OUTER CASE AND FENDER

Secure the outer case with the four screws provided. Locate the controls fender below the outer case.

4.8 TEST FOR SPILLAGE

A spillage test must be made before the installed fire is left with the user. This is carried out in the following manner. Light the fire and leave on at full rate. Close all the doors and windows in the room and after the fire has been alight for five minutes insert a lighted smoke match into the opening below the canopy. (See Fig. 7).

It may be necessary to hold the match with a pair of pliers or in a metal tube. If the smoke is drawn into the fire the installation is satisfactory.

If the smoke is not drawn into the fire leave the fire running for a further ten minutes then repeat the test. If the smoke is still not drawn into the fire inspect the sealing of the fire to the surround/hearth.

If this is satisfactory proceed as follows:-
If a spigot restrictor was fitted, disconnect the fire and remove the spigot restrictor. Re-install the fire and check for adequate sealing to the surround/hearth. Repeat the above spillage test. If there is still evidence of spillage then there is a fault with the chimney. DISCONNECT THE FIRE AND SEEK EXPERT ADVICE.

If a spigot restrictor was not fitted, DISCONNECT THE FIRE AND SEEK EXPERT ADVICE.

If there is a fan or fan operated appliance in a connecting room then the spillage test must be repeated with the fan running and all inter-connecting doors between the fan and the fire left open. If the fan and the fire are in the same room, close all windows and doors connected to the room. Switch on the fan and repeat the spillage test.

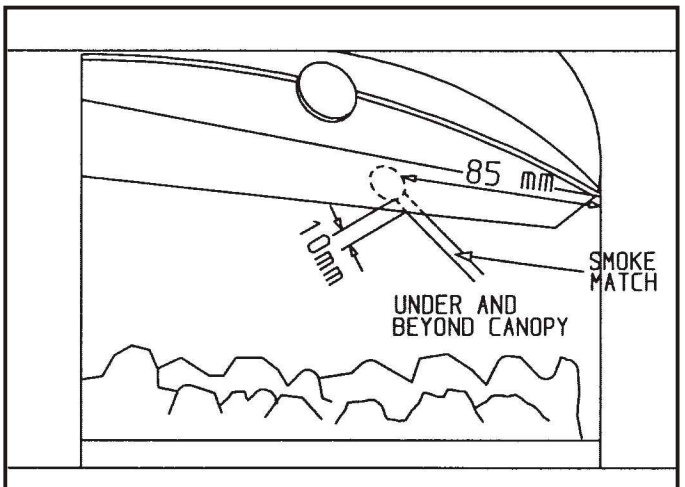


Fig. 7

4.9 TEST FSD

Light the fire and leave on full rate for a few minutes. Turn off the gas supply at the service cock or any other convenient isolating valve. Wait 3 minutes and re-establish the gas supply. Check that there is no gas to the burners. If so the safety valve has functioned correctly. Turn the control knob to the OFF position.

5.0 INSTRUCT USER

(Refer to Users Instructions)

Make sure that the user understands the following:-

(a) How to light and operate the fire.

(b) The fire can be lit with a match or taper in the event of failure of the Piezo ignition.

(c) Demonstrate the removal and replacement of the coals. Advise on the need to clean these regularly.

(d) Advise that for safe and efficient operation, the fire should be serviced annually by British Gas or CORGI registered service agent.

(e) When the fire is first lit a slight smell may be noticed but this will clear away with a few hours of use on HIGH.

(f) Advise the user to carefully clean the base of the fire with a vacuum cleaner, regularly.

Hand over the Users Instructions

6.0 SERVICING INSTRUCTIONS

IMPORTANT NOTES

1. Always test for gas soundness after servicing or exchanging any component.
2. Remove the fire from the surround and inspect the catchment space for build up of debris on every service visit.
3. Check the fire for clearance of products on every service visit.
4. Remove any lint from the burners especially around the aeration hole of the front burner.
5. Turn off the gas supply to the fire before starting any servicing.

1. TO REMOVE BURNER TRAY

1. Remove fender.
2. Remove outer case by undoing the four screws securing it to the fire.
3. Remove the 10 loose coals, front coal bed and LH and RH cheeks.
4. Disconnect the gas supply at the inlet to the fire.
5. Remove the four screws securing the burner tray to the firebox.
6. Slide out the burner tray.

2. FRONT BURNER INJECTOR

1. Remove burner tray (Section 6.1 above).
2. Undo the union nut on the burner inlet gas pipe at the gas tap end.
3. Undo the two screws securing the injector holder to the burner.
4. Withdraw the inlet pipe assembly.
5. Replace the injector.
6. Re-assemble in the reverse order.

3. REAR BURNER INJECTOR

1. Remove burner tray (Section 6.1 above).
2. Undo the union nut on the burner inlet gas pipe at the gas tap end.
3. Remove the two screws and washers securing the injector holder to the burner.
4. Withdraw the inlet pipe assembly.
5. Replace the injector.
6. Re-assemble in the reverse order.

4. GAS TAP ASSEMBLY (INCLUDING IGNITER)

1. Remove burner tray (Section 6.1).
2. Pull off the control knob.
3. Remove the two screws and washers securing the name plate.
4. Undo the gas connections to the gas tap.
5. Undo the thermocouple nut and ease out the probe.
6. Disconnect the spark lead.
7. Remove the two screws securing the gas tap to its bracket. Ease out the gas tap.
8. Replace with a new gas tap.
9. Re-assemble in the reverse order.

NOTE: If the gas tap itself or igniter is faulty the gas tap assembly must be renewed.

5. PILOT FILTER

1. Remove burner tray (Section 6.1).
2. Turn the tray upside down. Undo the nuts at each end of the pilot supply pipe and remove pipe.
3. Remove the pilot filter in the control pilot outlet and renew with a new one.
4. Re-assemble in the reverse order.

6. PILOT ASSEMBLY (Fig. 8)

NOTE: If the fire keeps going out or exhibits signs of nuisance shut off, check the operation of the pilot as follows:-

(a) Inspect the pilot flame.
(b) Check the thermocouple. If faulty replace the pilot assembly.
(c) Check the magnetic unit in the gas tap. If faulty replace the tap.
(d) Check the ventilation in the room. Vitiation may be due to lack of sufficient air supply.
(e) Check for satisfactory clearance of combustion products. Vitiation may be due to spillage or combustion products into the room.

1. Remove burner tray (Section 6.1).
2. Undo the pilot supply pipe at the pilot end and ease out the pipe.
3. Undo the thermocouple nut at the gas tap end and ease out the thermocouple.
4. Pull out the spark lead, at the pilot end.
5. Undo the two screws securing the pilot assembly to its bracket.
6. Replace with a new pilot assembly.
7. Re-assemble in the reverse order.

A lint trap has been fitted to the pilot to filter out any dust or lint which may present in normal household room air.
If you notice that the appliance has a floppy yellow pilot flame and/or there is difficulty in lighting the appliance then the lint filter may need cleaning. Cleaning should be carried out by vacuuming the dust and lint from the filter. If vacuuming alone is not successful in curing the ignition problem then a CORGI registered service engineer must be called to investigate the problem.
To remove the lint filter for cleaning or to gain access to the aeration hole simply slide the lint filter downward.
When supplied as a spare part the lint trap must be fitted as shown and crimped to fix in place.

7. FUEL EFFECT COMPONENTS

For replacement of front coal bed and side cheeks refer to Section 4.5 of the Installation Instructions.

CENTRE COAL

1. Remove burner tray (Section 6.1).
2. Undo the two screws on the underside of the burner tray securing the coal carrier and remove the coal assembly.
3. Undo the screw securing the centre coal to its carrier and remove the coal.
4. Refit in the reverse manner.

REAR COAL BED

1. Remove burner tray (Section 6.1).
2. Undo the four screws securing the top deflector plate and remove. (When removing the plate, support the coal bed to prevent it from falling forward).
3. Lift off the rear coal bed.

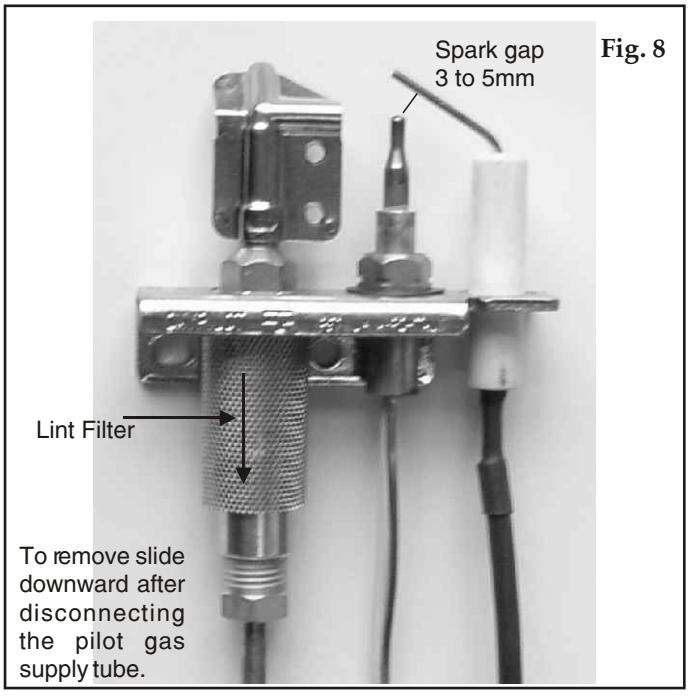


Fig. 8

ODS PILOT ASSEMBLY WITH LINT FILTER FITTED

COMPONENTS

KEY NUMBER	G.C. NUMBER	MAKERS PART NUMBER	DESCRIPTION
66	379 687	822175	Gas Tap Assembly
68	159 548	992452	Control Knob
43	379 044	822131	Pilot Filter
41	159 584	992495	Pilot Assembly
44	159 421	993132	Spark Lead
69	159 549	992443	Rear Coal Bed
34	159 541	992440	Centre Coal
73	159 741	991650	Front Coal Bed
71	159 551	992442	Left Hand Side Cheek
72	159 552	992441	Right Hand Side Cheek
104	159 744	991625	10 Coals

Available in the following finishes:-

Black (stoved paint)
Bronze
Gunmetal
Pewter
} Vitreous enammel } With brass effect trim / With silver effect trim

991630
Issue 3
ROBINSON WILLEY LIMITED
Mill Lane, Old Swan, Liverpool L13 4AJ
Telephone: 0151-228 9111 Fax: 0151-228 6661
Website: www.robinson-willey.com