

Section 12

LIGHTING INSTRUCTIONS FOR 'REMOTE-SWITCHED' VERSIONS - 849.SWN & 849.STN

See Fig. 9, 10 and 11

- 12.1 Remove the cap from the isolator fitting and unscrew the plug all the way out. Replace the cap ensuring that the cap engages with the slot at the top of the plug. Tighten the cap securely.
- 12.2 Push in and turn the control knob anticlockwise to the pilot position. (see Fig. 11)
- 12.3 Hold the knob in for several seconds and purge the air from the system.
- 12.4 With the knob still depressed, turn it from the OFF position to the PILOT position until the pilot light ignites. Continue to depress the control knob for a further 10 - 15 seconds. Release the control knob; the pilot should stay alight. If the pilot flame goes out, repeat the process, holding down the control knob for a slightly longer period.
- 12.5 Switch on the mains supply at the fused spur. Switch on the fan by depressing the Fan switch on either the 'Trim Switch' or the 'Wall Switch'. (see Fig. 9 or 10) After a short while the fan will achieve optimum speed and the air pressure switch (in the fan box) will detect adequate airflow and open the solenoid valve. When this occurs, gas is available to the main burner.
- 12.6 Depress the control knob slightly and turn it anticlockwise to the ON position. The main burner should now light.
- 12.7 Depress the second switch and the flames will get lower but the main burner will still be alight.
- 12.8 Depress the control knob slightly and turn Clockwise to the pilot position - the main burner will go out but the pilot light will remain alight.
- 12.9 Depress the control knob slightly and turn clockwise to the OFF position. The pilot flame will go out.

IMPORTANT: After turning OFF, or if the pilot and appliance go out for any reason then wait 3 minutes before attempting to re-light the appliance.

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EXEL Plus

FEF+3
Fan Powered, Side Flue
Gas Coal Radiant Fire

Models: 749.SMN (Manual Nat.Gas)
749.SML (Manual LPG)
849.SWN (Trim Switch Nat.Gas)
849.STN (Wall Switch Nat.Gas)

and 749.SMNC

INSTALLATION INSTRUCTIONS

THIS PRODUCT IS APPROVED TO THE EUROPEAN GAS APPLIANCE DIRECTIVE

THESE INSTRUCTIONS SHOULD BE
RETAINED BY THE USER FOR FUTURE REFERENCE

COMPONENT LIST (for EXEL Plus)

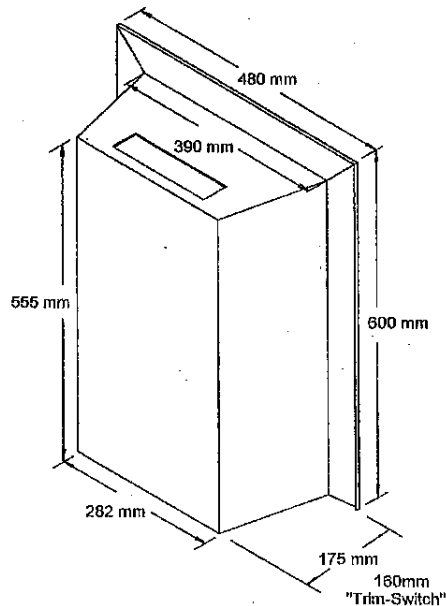
Before commencing with the installation, ensure that all of the components listed below are included in the packaging.

- | | |
|--|--------------------------------------|
| 1- Fire Box and Burner Tray | 1- Complete Fan Unit Comprising of : |
| 1- Set of Ceramic Components as: | a) Wall Plate |
| a) 1 Base Ceramic | b) Fan Unit |
| b) 1 Rear Ceramic | c) Painted Fan Cover |
| 1- Bag of coals comprising: | 1- Set of Flue Sections |
| a) 5 Large Square Coals | 1- Flue Adaptor |
| b) 6 Small Square Coals | 1- Length of Glass Rope |
| c) 9 Large Random Coals | 1- Wire Mesh Cage (optional) |
| d) 7 Small Random Coals | 1- Fire Frame (optional) |
| 1- Set of User's Instructions | 1- Fire Fret (optional) |
| 1- Guarantee Card (for User to complete) | |

This appliance must be installed in accordance with the rules in force and used only in a sufficiently ventilated space. Consult instructions before installation and use of this appliance.

Made in England
Country of Destination: GB and IE

NOTE: THIS FIRE IS NOT SUITABLE FOR SOLID FUEL
AND IS INTENDED FOR DECORATIVE USE ONLY



10. CHECKING FOR SPILLAGE

- 10.1 Before briefing the customer on how to use the appliance, a spillage test must be carried out on the appliance with the decorative fret in position. The following procedure must be followed:
- 10.2 Close all doors and windows in the room or space containing the appliance.
- 10.3 Light the appliance and burn at maximum for 5 minutes.
- 10.4 Light a smoke match and pass completely along the top front edge (and just inside the top edge) of the appliance opening. A visual check should be ascertained that all the smoke generated is drawn back into the firebox.

BRIEFING THE USER

- a) Demonstrate the full operation of the appliance to the user, referring them specifically to the lay of the coals and the removal of soot, as described in the USER'S Instructions.
- b) Inform the user that all cleaning procedures should be carried out only when the appliance is cold and disconnected from the Mains Electricity Supply.
- c) Leave these Instructions and the User's Instructions with the User.
- d) Advise the User of the importance of having the appliance serviced and the flue system and fan checked for clearance of combustion products on an annual basis.

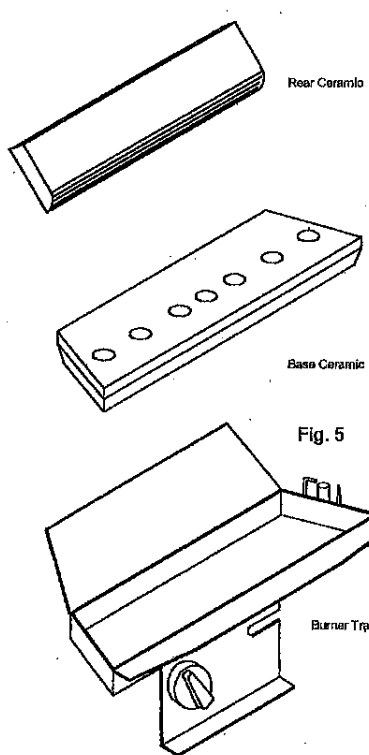
11. SERVICING & MAINTENANCE

- 11.1 BEFORE ANY SERVICING IS CARRIED OUT, ISOLATE THE APPLIANCE FROM THE MAINS ELECTRICITY SUPPLY AND THE GAS SUPPLY. AFTER REFITTING THE APPLIANCE, CHECK FOR GAS SOUNDNESS AT ALL GAS JOINTS AND CHECK FOR SPILLAGE.
- 11.2 The coals and ceramics should be taken off the fire and all debris and soot removed from them and the burner slots. This can be done using a vacuum cleaner although care must be taken not to damage any of the ceramic parts.
- 11.3 Check that there is no impairment to the electrode spark or pilot light.
- 11.4 Check that the pilot flame is satisfactory. If this is not the case then remove and clean the pilot injector.
- 11.5 Re-build the coal lay precisely as described in the Installation Instructions.
- 11.6 Make final adjustment to the coals to obtain a satisfactory visual effect.
- 11.7 Dismantle the fan from the fan box and clean the blades of any soot or debris.

1. APPLIANCE DATA

749.SMN/C 749.SML 849.SWN 849.STN

Gas Type	Nat.Gas Cat. I2h	Propane Cat I3p	Nat.Gas Cat.I2h	Nat.Gas Cat I2h
Jet Size (1 only)	2.16mm dia.	1.3mm dia.	2.15mm dia.	2.15mm dia.
Maximum Input	6.9 kW	6.9 Kw (500gph)	6.9 kW	6.9 kW
Minimum Input	4.5 kW	4.5 kW (330gph)	4.5 kW	4.5 kW
Inlet Pressure	20mbar	37mbar	20mbar	20mbar
Gas Connection	8mm Comp.	8mm Comp.	8mm Comp.	8mm Comp.
Supply Voltage	220-240V a.c.~	220-240V a.c.~	220-240V a.c.~	220-240V a.c.~
Supply Frequency	50Hz	50Hz	50Hz	50Hz
Supply Fuse	3 Amp	3 Amp	3 Amp	3 Amp
Weight	25kg (55lbs)	25kg (55lbs)	25kg (55lbs)	25kg (55lbs)
Protection	IP44	IP44	IP44	IP44

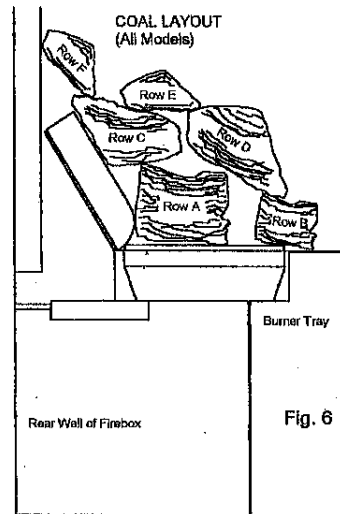


Rear Ceramic

Base Ceramic

Fig. 5

Burner Tray



COAL LAYOUT
(All Models)

Burner Tray

Rear Well of Firebox

Fig. 6

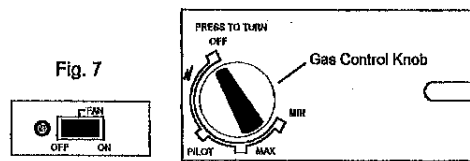
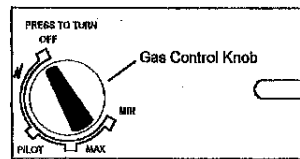


Fig. 7

Fig. 8



Gas Control Knob

Fig. 9

CONTROLS FOR 'MANUALLY' OPERATED FIRES

Fig. 9

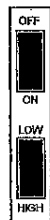


Fig. 10

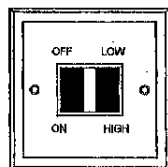
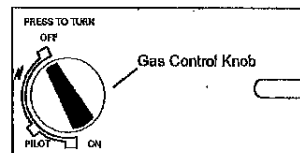


Fig. 11



Gas Control Knob

CONTROLS FOR 'REMOTE-SWITCHED' FIRES

2. GENERAL INSTALLATION REQUIREMENTS

The law demands that all gas appliances are installed by a competent person in accordance with the current GAS SAFETY (INSTALLATION AND USE) REGULATIONS 1984. The installation must comply with these installation instructions and all relevant parts of Local and National Building Regulations and the Institution of Electrical Engineers Regulations and those relevant recommendations of the following British Standards.

BS 5871, Part2 BS 8303 DM2 (British Gas)
BS 5440, Parts 1 & 2 BS 1251 BS 6891

These installation instructions must be adhered to without exception

- 2.1 The appliance must be fitted with a non-combustible hearth having a minimum thickness of 12.5mm (1/2"). The hearth must be at least 300mm (12") deep and must extend a minimum of 150mm (6") either side of any naked flame or incandescent radiant source. The periphery of the hearth must be at least 50mm (2") above the floor level. (Under BS 5871 Part 2, the installation of a fender of 50mm (2") high will satisfy this requirement).

NOTE: For installations in Eire please consult Local & National Regulations regarding Hearth sizes & depths etc.

- 2.2 The whole of the flue system MUST be insulated with a minimum of 12mm thick Masterboard, Superlux or equivalent. Or use 25mm thick Rockwool Grade RW5.

- 2.3 Ventilation

Subject to a satisfactory spillage test, no purpose-made ventilation is required (except in Eire).

2.4 FLUE TERMINAL POSITION

The minimum acceptable dimensions from the flue terminal to obstructions and ventilation openings are shown in Fig. 2 and Table A.

Table A. MINIMUM DIMENSIONS FOR FLUE TERMINAL POSITION

(The following dimensions are measured from the centre of the flue outlet)

Dimension	Terminal Position	Minimum
A	Directly below an opening, air brick, window etc.	300 mm
B	Below gutters, soil pipes or drain pipes	75 mm
C	Below eaves	200 mm
D	Below balconies or car port roof	200 mm
E	From a vertical drain pipe or soil pipe	75 mm
F	From an internal or external corner	300 mm
G	Above ground, roof or balcony level	300 mm
H	From a surface facing the terminal	600 mm
I	From another terminal facing the terminal	1200 mm
J	From an opening in a car port	1200 mm
K	Vertically from another terminal on the same wall	1500 mm
L	Horizontally from another terminal on the same wall	300 mm

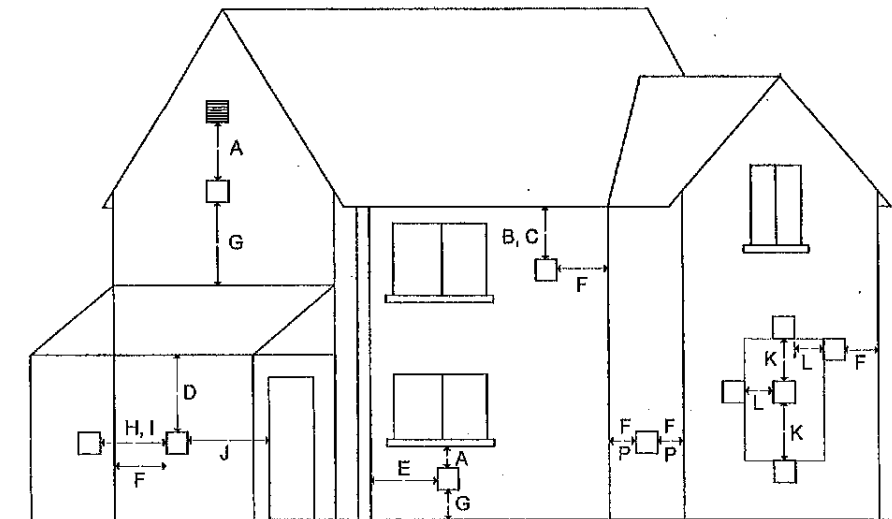


Fig 2.

- 9.5 Switch on the mains supply at the fused spur. Switch on the fan by depressing the Fan switch on the control panel. (see Fig. 7) After a short while, the fan will achieve optimum speed and the air pressure switch (in the fan box) will detect adequate air flow and open the solenoid valve. When this occurs, the green 'GAS' neon indicator will be illuminated, indicating that gas is available to the main burner.
- 9.6 Depress the control knob slightly and turn it anticlockwise to the HIGH position. The main burner should now light. (see Fig. 8)
- 9.7 Turn the knob anticlockwise to the LOW position, the flames will get lower but the main burner will still be alight.
- 9.8 Depress the control knob slightly and turn Clockwise to the pilot position - the main burner will go out but the pilot light will remain alight.
- 9.9 Depress the control knob slightly and turn clockwise to the OFF position. The pilot flame will go out.

IMPORTANT: After turning OFF, or if the pilot and appliance go out for any reason then wait 3 minutes before attempting to re-light the appliance.

NOTE: It is perfectly safe and acceptable, to switch the fire on and off just by using the fan switch when the gas control knob is on high or low (or anywhere between). Doing this simply leaves a standing pilot.

- 7.3 Prior to connecting the fire tray to the gas supply, it is **essential** that the gas supply pipe is purged to remove any debris or dust which may have been collected in the pipework during the installation.
- 7.4 Using the nut and olive provided, connect the 8mm gas pipe to the isolation cock on the fire tray (provided).
- 7.5 Gas Soundness Check. With the gas supply connected, ALL joints should be checked for gas soundness in accordance with BS 6891. Note, it is permissible to light the fire for short periods of time only when the fire is NOT laid with the ceramics and coals.

8. ASSEMBLING THE FIRE & PLACING THE COALS (all models)

CAUTION : All of the ceramic components are **FRAGILE** and should be handled with care.

- 8.1 The fire tray and ceramics are illustrated in Fig. 5. Take the base ceramic and place it on the fire tray then take the rear ceramic and stand it at the rear of the base ceramic with the curved edge facing forwards.
- 8.2 With reference to Fig. 6 Lay the coals as follows :
- ROW A.** Place 5 Large Square Coals evenly spaced along the back edge of the base ceramic and tightly up against the rear ceramic.
 - Row B.** Place 6 Small Square Coals at the front of the burner tray ensuring that the burner ports in the base ceramic remain clear. (These coals should be evenly spaced and project on to the front spacer)
 - Row C.** Place 4 Large Random Coals on top of Row A, packed tightly together and resting against the rear ceramic.
 - Row D.** Bridge the gap between Rows A and B with 5 Large Random Coals evenly spaced and positioned lengthways from back to front.
 - Row E.** Place 4 Small Random Coals between Rows D & E and bridging the gap between the coals in Row D
 - ROW F.** Place 3 Small Random Coals (evenly spaced) on top of Row C and touching the back of the fire box.

9. LIGHTING THE APPLIANCE (Models 749.SMN & 749.SML) See Fig 7 & 8

For Models 849.SWN & 849.STN - see section 12

- 9.1 Remove the cap from the isolator fitting and unscrew the plug all the way out. Replace the cap ensuring that the cap engages with the slot at the top of the plug. Tighten the cap securely.
- 9.2 Push in and turn the control knob anticlockwise to the pilot position.
- 9.3 Hold the knob in for several seconds and purge the air from the system.
- 9.4 With the knob still depressed, turn it from the OFF position to the PILOT position until the pilot light ignites. Continue to depress the control knob for a further 10 - 15 seconds. Release the control knob; the pilot should stay alight. If the pilot flame goes out, repeat the process, holding down the control knob for a slightly longer period.

3. PREPARING THE FIRE & FLUE SECTIONS

- 3.0 Before installation commences check that the OUTSIDE ground level is at least 150 mm (6") LOWER than the INTERNAL floor level. If this is NOT THE CASE then an "S" bend will have to be fitted (2 Elbows connected together to form an "s" bend) internally to raise the Fan Box above the OUTSIDE ground level. It must be noted, however, that the addition of such an "S" bend (equal to 2 Elbows) will reduce the maximum overall flue length allowed, by 4 feet.
- 3.1 After deciding whether the flue is to vent to the right or the left, prepare the flue sections by assembling the relevant flue sections to the top of the small gather hood on the top of the firebox.
- 3.2 Position the firebox on the hearth ensuring that any part of the flue system will not be closer than 25mm (1") to any combustible material. Fix the fire box down to the hearth using the fixing holes supplied in the base of the fire box.
- 3.3 Attach sufficient flue sections, so that they will reach and eventually pass through the outside wall where the fan box will be fitted.
- 3.4 The last piece of flue section will have to be accurately cut to a length that will allow it to mate with the input to the fan box.

4. PREPARING THE FAN BOX OPENING ON THE 'OUTSIDE' WALL

- 4.1 Mark a rectangular hole on the outer leaf of brickwork 216mm (8.5") wide, and 330mm high (13") high. It's vertical centre line **must** be vertical to the centre line of the flue pipe as it emerges through the brickwork looking from the outside.
- 4.2 **IMPORTANT** : At this stage care must be taken NOT to break through any damp-proof course which might be in the vicinity of this hole. Should this seem necessary then the installation can only probably proceed with the addition of an "S" bend as previously described.
- 4.3 If the position of the fan box is satisfactory then proceed as follows:
- 4.4 Cut away the outer brickwork along this line to form a rectangular opening for the wall plate of the fan unit to enter.
- 4.5 Cut a smaller hole in the inner skin of brickwork in line with the outer hole but sufficient only for the 150mm x 150mm flue section to pass through and match up with the wall plate flange. The top of this hole will need to be approximately 300mm (12") higher than the top of the floor level.
- 4.6 Take the wall plate and insert it into the outside hole making sure that the cable entry hole is at the top, then drill and plug the brickwork and fix the wall plate to the wall.

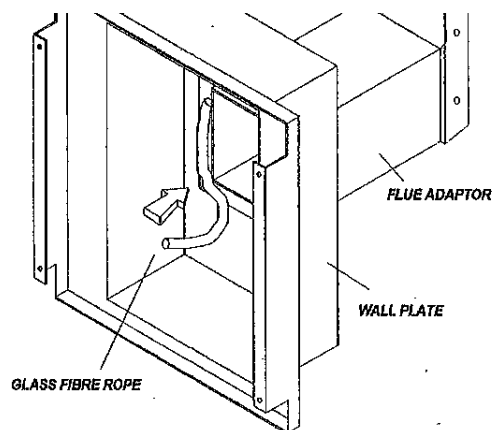


Fig.3

5. CONNECTING THE FLUE PIPE TO THE FAN BOX

- 5.1 Position the firebox on the hearth and connect sufficient flue lengths to reach the final connection on the wall plate.
- 5.2 Cut the last flue length at a position such that the flue adaptor can be fitted (This converts the flue from rectangular to square (see Fig. 3)
- 5.3 From outside, insert the Fibre Rope Gasket into the gap between the female flue spigot of the wall plate and the flue adaptor.
- 5.4 Take the grey 5-core cable from the fire box, following along with the flue and pass it through the strain-relief bush in the back of the wall plate leaving about 150mm (6") to pass into the wall plate before securing the bush.
- 5.5 Take the fan unit, and position it into the wall plate with the printed circuit board assembly at the TOP.
- 5.6 Whilst feeding the 5-core cable through the cable entry hole in the fan unit, push the fan unit into the wall plate until it engages securely. Fix it in position with the screws.
- 5.7 Connect the 6-way miniature plug (on the end of the grey 5-core cable) to the 6-way socket emerging from the printed circuit board in the fan unit.
- 5.8 Re-attach the painted cover with the four screws and seal the painted cover to the wall all around with Silicone Sealant to prevent rain or moisture getting into the system. (See Fig. 4)

IMPORTANT :

Seal to the wall after installation with Silicone Sealant to prevent water entering the system.

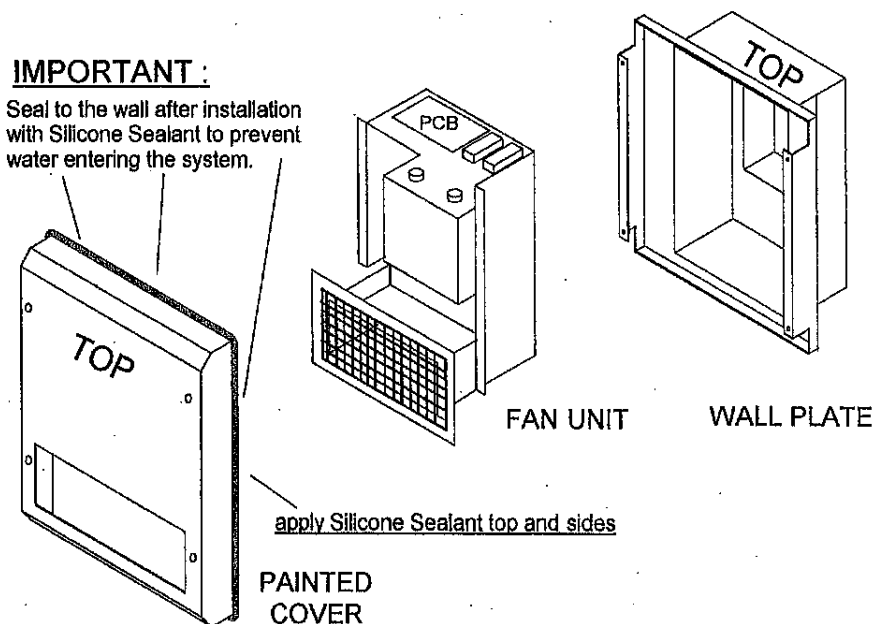


Fig.4

6. GAS SUPPLY

- 6.1 The gas supply should be routed from the supply to a point convenient to the firebox using rigid or semi-rigid gas pipe (ensuring that the pipe is sleeved when passing through masonry). At this point, the gas pipe MUST be routed to the isolation gas cock fitted to the burner tray.
- 6.2 Decide whether or not the gas pipe is to be routed through the side or rear of the fire box or indeed to the front.

7. FITTING THE FIRE TRAY

- 7.1 Check that the spark ignition system functions correctly. Push and turn the gas control knob and check that a spark is generated at the pilot burner. Check the tightness of the nut at the control valve end of the thermocouple.

CAUTION: Do not overtighten this nut.

- 7.2 Fit the fire tray within the fire box and screw into place with the screws provided.