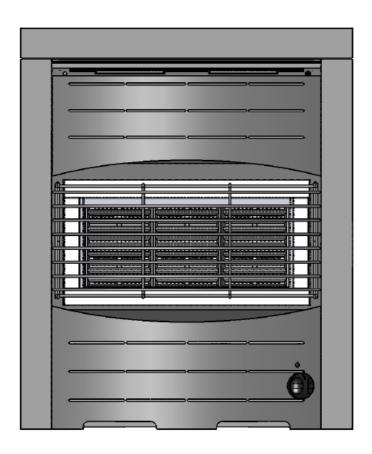


BUILD IN APPLIANCES

FOR USE WITH LIQUIFIED PETROLEUM GAS (LPG) OR NATURAL GAS

CAUTION - ALL OUTER SURFACES WILL GET HOT WHEN IN USE

GAS FIRE MODELS S~FI24000 (LPG) S~FI24000NG (Natural Gas)



INSTALLATION, USE & MAINTENANCE

MODEL	S~FI24000	S~FI24000NG
Gas Type	LPG	NATURAL GAS
	(G30 & G31)	(G20)
Size, mm	HxWxD	HxWxD
Fire Front	602 x 498 x 89	602 x 498 x 89
Rear Box	542 x 383 x 158	542 x 383 x 158
Total Input	3.8kW	3.8kW
Gas Rate	$0.365 \text{m}^3/\text{hr}$	$0.365 \text{m}^3/\text{hr}$
Efficiency	Class 1	Class 1
Injector Size	Ø 1.0mm	Ø 1.4mm
Ignition	INTEGRAL PIEZO	INTEGRAL PIEZO
Voltage	N/A	N/A
Nox Rating @ 0% O ₂ , 171.83 mg/kWh		

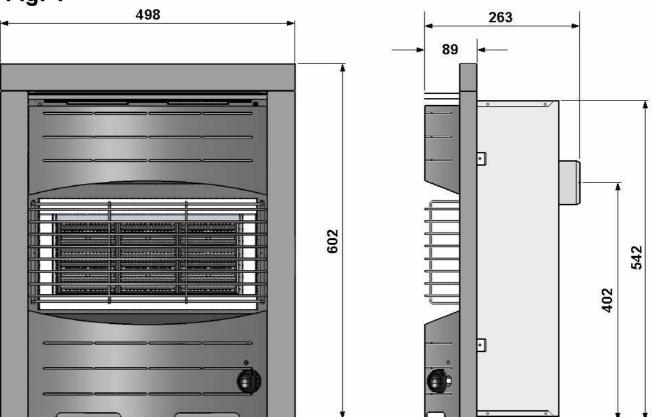
Gas Category

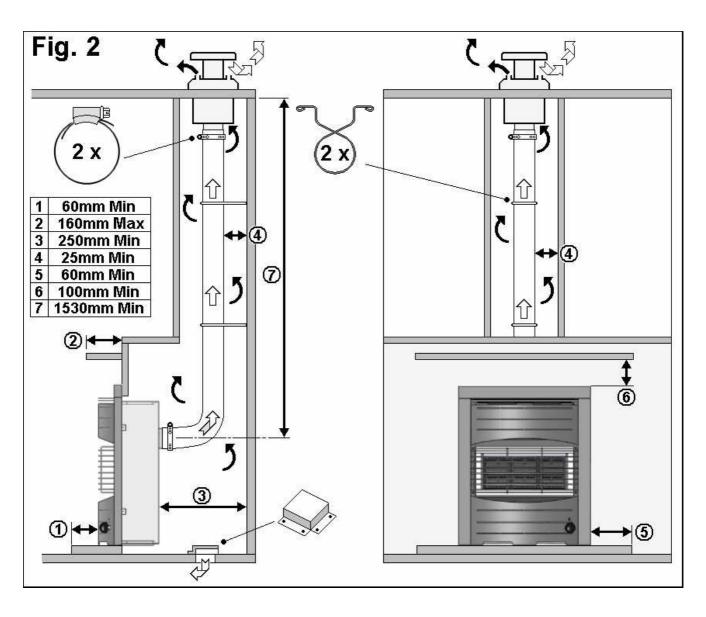


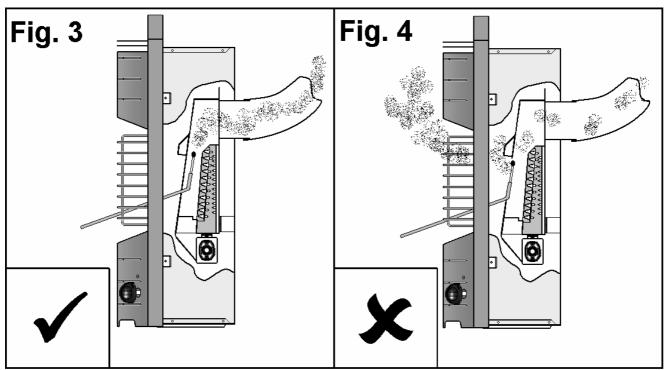
CAT I_{3 + (28-30/37)} Butane (G30) 28-30mbar Propane (G31) 37mbar CAT I_{3 B/P (30)} BUTANE (G30) 30mbar Propane (G31) 30mbar CAT I_{2 H(20)} Natural Gas (G20) 20mbar

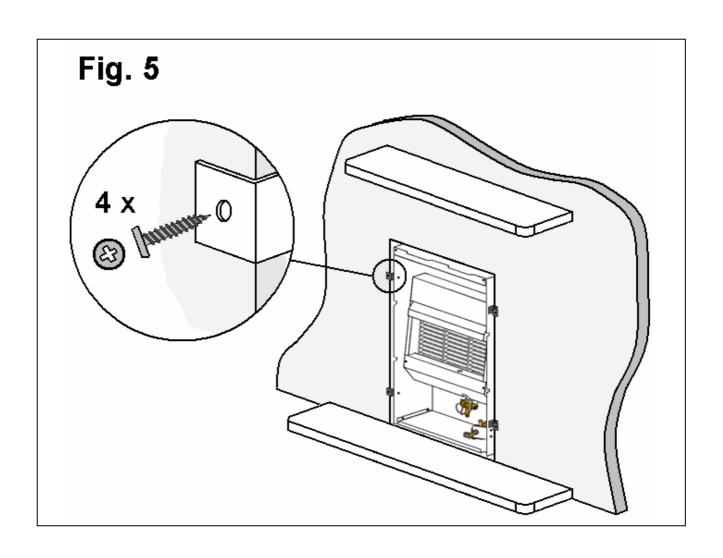
- Only use with LPG or Natural Gas as specified above
- Only use the gas pressures as specified above

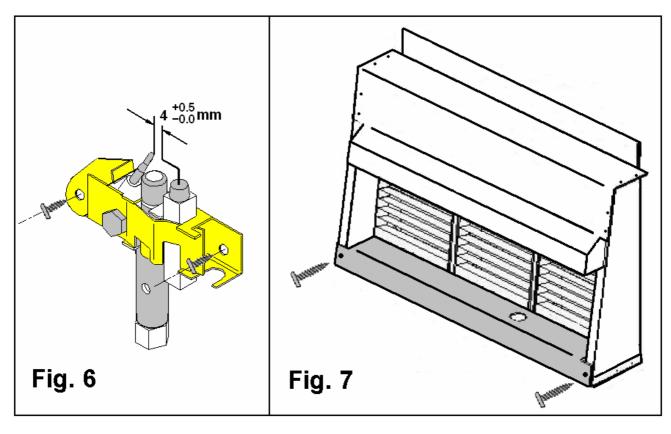
Fig. 1











INTRODUCTION GB

This appliance must be installed in accordance with the local, national and European regulations in force. Particular attention shall be given to the requirements regarding ventilation. Read the instructions before installing or using the appliance. The appliance MUST be installed by an approved competent person.

Failure to install the appliance correctly could invalidate any warranty or liability claims and lead to prosecution. Please refer to the methods of installation within this handbook.

Our policy is one of continuous development and improvement. Specifications and illustrations may change subsequent to publication.

PROVISION OF VENTILATION

The use of a gas appliance results in a production of heat and moisture in a room in which it is installed. Ensure the room is well ventilated, keep natural ventilation holes open or install a mechanical ventilation device, (mechanical extractor fan).

Prolonged intensive use of the appliance may call for additional ventilation, for example opening a window, or more effective ventilation, for example increasing the level of mechanical ventilation where present.

The room containing the fire should have an air supply in accordance with local and national/European standards.

POSITION

This appliance must be positioned free from draughts, which may affect the combustion, and in a manner that will prevent the accumulation of unburnt gas. When in use ensure that air vents are not inadvertently blocked or shut off.



LPG (GAS) APPLIANCES MUST NOT BE INSTALLED BELOW GROUND LEVEL. E.G. IN A BASEMENT.

OPERATION

The burner on this appliance has fixed aeration and no adjustment is required. Depending on the gas being used, the burners should flame as follows: -

Propane - The flames should burn quietly with a blue/green colour with no sign of yellow tips.

Butane - Normally on initial lighting, a small amount of yellow tipping will occur and then slightly increases as the burner heats up.

Natural gas - The flames should burn with a blue/green colour with no sign of yellow tips.



THE APPLIANCE IS FITTED WITH AN OXYGEN DEPLETION SENSOR AS STANDARD. THE SENSOR WILL EXTINGUISH THE FLAME IF EVACUATION OF THE COMBUSTION PRODUCTS IS INTERRUPTED.

IF THE OXYGEN DEPLETION SENSOR OPERATES REPEATEDLY TURN OFF THE GAS AND CONTACT YOUR DEALER.

OPERATION

Ensure the gas cylinder is turned on. In the event of a gas smell, turn off at the cylinder and contact supplier.

IGNITION

(1) Press in the control knob. (2) Keeping the control knob pressed in rotate the knob anticlockwise, until the spark igniter clicks twice. (3) Ensure the pilot and main burner flames are established, keep the knob pressed for approximately fifteen seconds then release. (4) If burner ignition fails return the knob to '**OFF**' position, wait one minute before repeating above sequence holding the knob depressed for longer.

FLAME SETTINGS

(1) Light the fire following ignition sequence above. (2) After ignition the setting of the fire is on LOW Flame. (3) To adjust to High Flame, rotate the knob fully anti-clockwise until it comes to a stop. (4) To turn the fire off, rotate the knob fully anti-clockwise until the line on the knob is adjacent to the 'dimple' on the fire grate.

DO'S AND DON'TS

- DO read the user instructions carefully before using the appliance for the first time.
- DO allow the fire to burn off for one hour to expel any smells or lubricants.
- DO clean the appliance regularly with a damp cloth, only when the fire has cooled down.
- DO check that controls are in the off position when finished.
- DO have the appliance serviced at least once a year.
- DO check periodically that the air vents and flue are clear from obstructions.
- DO NOT allow children near the fire when in use.
- DO NOT use abrasive cleaners or powders that will scratch the surfaces of the fire.
- DO NOT during operation touch any parts of the fire other than the control knob.

LEAKS

If a smell of gas becomes apparent, the supply should be turned off at the cylinder IMMEDIATELY. Extinguish naked lights including cigarettes and pipes. Do not operate electrical switches. Open all doors and windows to disperse any gas escape. Butane/Propane gas is heavier than air; any escaping gas will therefore collect at a low level. The strong unpleasant smell of gas will enable the general area of the leak to be detected. Check that the gas is not escaping from an unlit appliance

MAINTENANCE

This appliance needs little maintenance other than cleaning. All parts should be cleaned using either a duster or a damp cloth. Do not use abrasive cleaners, steel wool or cleansing powders. The control knob is a push fit and can be removed for cleaning.



- IF FOR ANY REASON THE FLAME SHOULD GO OUT DO NOT ATTEMPT TO RE-IGNITE THE BURNER FOR AT LEAST THREE MINUTES.
- NEVER CHECK FOR LEAKS WITH A NAKED FLAME.
- NEVER USE SOAPY WATER FOR LEAK DETECTION, SALT AND OTHER INGREDIENTS IN SOAP CAN SERIOUSLY DAMAGE THE PRECISION COMPONENTS OF THE FIRE

INSTALLATION GB

Regulations and Standards

These installation and service instructions are intended for use by an approved competent person only. If you are not competent then you must not attempt any of the following procedures.

Before installation, ensure that the local distribution conditions (identification of type of gas and pressure) and the adjustment of the appliance are compatible. All local and National/European standards in force must be adhered to.

Failure to install the appliance correctly could invalidate any warranty or liability claims and lead to prosecution. Particular attention shall be given to the requirements regarding ventilation. Read the instructions before installing or using this appliance.

Location of Appliance

The appliance maybe installed in a lounge/lounge diner but NOT in a room containing a bath or a shower. LPG (Gas) appliances must NOT be fitted below ground level. e.g. in a basement.

Ventilation

This appliance is suitable for installation into Holiday Homes only. In all cases the national standards with regard to ventilation for the particular vehicle into which the appliance is to be installed must be adhered to.

The flue cavity **MUST** be ventilated, we recommend a flue terminal with integrated vent (Please contact Spinflo by Thetford for details) or by a vent in the wall. The gas escape vent should be positioned as detailed on the included installation drawings and **MUST** be baffled to prevent direct draught to the fire.

The vents **MUST** comply to the following dimensions:-

High Level Vent Flue Terminal with integrated vent

OR

Wall vent (5000 sq mm Min - 6000 sq mm Max Size)

Gas Escape Vent 5000 sq mm (Minimum Size)

14400 sq mm (Maximum Size)



- THIS APPLIANCE <u>MUST</u> BE INSTALLED INTO A VENTILATED ENCLOSURE WHICH MEETS THE SPECIFICATION DETAILED WITHIN THIS HANDBOOK. HOLES FOR CABLES AND PIPES MUST BE SIZED TO MINIMIZE AIR LEAKAGE BETWEEN COMPARTMENTS.
- THE GAS SUPPLY INPUT PRESSURE TO WHICH THIS APPLIANCE IS CONNECTED, <u>MUST</u> NOT RISE OR FALL BY MORE THAN

2.5 MBAR (BUTANE/PROPANE)
1.0 MBAR (NATURAL GAS)

FROM NOMINAL, WHEN ALL CONNECTED APPLIANCES ARE OPERATED SIMULTANEOUSLY.

INSTALLATION GB

POSITION

All models must be installed and positioned on a hearth with a minimum distance of 60mm from the outside of the surround trim to the outside of the hearth. The hearth should also extend a minimum of 60mm from the front of the grate – see Fig. 2.

If the fire is to be installed with a shelf/curtain above, the shelf/curtain must be a minimum of 100mm above the surround trim and not exceed 160mm in depth – see Fig. 2.

Fires produce high levels of heat during use. It is important the installer verifies the furniture construction material is suitable for the application - i.e. Plastic materials used in the construction may have a softening point lower than the maximum allowable temperature rise specified in the relevant European Standards (EN13278)

This appliance must be positioned free from draughts, which may affect the combustion, and in a manner that will prevent the accumulation of unburnt gas. When in use ensure that air vents are not inadvertently blocked or shut off.

FIXINGS

The aperture for the appliance is 560mm high by 421mm wide, and the appliance is fixed as shown in Fig. 5. The flue pipe must be fixed to the rear outlet of the appliance and to the flue terminal by the use of the worm drive clips provided.

Where installations do not allow a vertical rise of the flue pipe directly behind the appliance the flue pipe **MUST** be incline towards the flue terminal rising to vertical as soon as possible. If the appliance cabinet is unusually deep then the flue pipe must rise with a minimum gradient of 10°.

Fire surround must fit flush against fire front and provide rigid mounting for the fire securing brackets.

GAS CONNECTION

The connection is made to an Ø8mm inlet pipe through the rear case of the fire. The fire MUST be connected using metal pipe manufactured from either copper, seam welded steel, seamless steel or stainless steel, which complies with the requirements detailed within EN1949. Rubber tubing must NOT be used.



- INLET COMPRESSION JOINT ASSEMBLE ONTO PIPE AND TIGHTEN NUT BY HAND. WHILST HOLDING PIPE IN POSITION, TIGHTEN NUT BY SPANNER 1 FULL TURN (6 FLATS). CHECK FOR LEAKS. IF NECESSARY NUT CAN BE TURNED A FURTHER 2 FLATS TO ACHIEVE SEAL. MAX TURN = 8 FLATS
- IF JOINT CANNOT BE MADE GAS TIGHT, NUT, OLIVE AND PIPE MUST BE REPLACED WITH NEW PARTS.
- FLUE PIPE SUPPLIED WITH FIRE IS THE ONLY PIPE THAT SHOULD BE USED.
- FLUE TERMINAL SUPPLIED IS THE ONLY TYPE THAT CAN BE USED WITH THE FIRE.

INSTALLATION GB

OPERATIONAL TESTS

- 1. Ensure the gas cylinder is turned on.
- 2. Check the ignition functions correctly and the pilot remains lit
- 3. Turn to high rate, check function correct.
- 4. Turn off, check flame extinguished and knob position correct
- 5. Test For Spillage

THIS TEST MUST BE CARRIED OUT BEFORE THE INSTALLATION IS PASSED OVER TO THE CUSTOMER.

- Ensure all doors and windows to the room containing the fire are closed.
- Ignite the fire and turn on to full rate as previously described.
- After a period of between ten and fifteen minutes, a lighted smoke match should be held adjacent to the fire outlet, central to the middle radiant, halfway between the radiant and the front of the radiant housing canopy. Use an extension tube to hold the match and ensure that smoke is drawn into the fire outlet. Figs 3 & 4 show the correct and incorrect positions for the match.
- If smoke is drawn into the outlet then the flue assembly is working correctly, if not then check the following points:-
 - The flue pipe has been properly sealed.
 - That there is not a blockage in either the flue pipe or terminal.
- The test should be repeated after an interval of at least a further fifteen minutes and if still unsatisfactory advice should be sought from the supplier.
- If an extractor fan is fitted in the same or adjacent room as the fire, then the test should be carried out with the fan switched on.

FINAL CHECKS

- 1. Ensure all removable panels are securely attached.
- 2. Clean off any marks or dust that may have occurred during installation.
- 3. Ensure installation and user instructions are available for the owner.



- AFTER INSTALLATION THE APPLIANCE MUST BE TESTED FOR GAS SOUNDNESS.
- DO NOT OVER TIGHTEN GAS JOINTS.
- IF THE FIRE IS REMOVED FOR SERVICING, REMAKE BY HAND THE EXISTING INLET CONNECTION UNTIL THE NUT IS TIGHT ON THE OLIVE. JOINT CAN THEN BE MADE GAS TIGHT BY TURNING <u>NO MORE</u> THAN 2 FLATS USING A SPANNER

SERVICE GB

ALL SERVICING MUST BE CARRIED OUT BY AN APPROVED COMPETENT PERSON AFTER EACH SERVICE THE APPLIANCE MUST BE CHECKED FOR GAS SOUNDNESS



AT LEAST ONCE EVERY 12 MONTHS THE FIRE, FLUE & TERMINAL SHOULD BE CHECKED FOR CORRECT OPERATION.

1. Remove front cover from appliance

Turn off gas supply. Remove the push fit control knob. Remove fixing screws located below top deflector. Pull top of cover away from fire and lift off.

2. Remove appliance from housing

Perform step (1). Disconnect gas supply from fire. Remove four fixing screws from fixing brackets (fig. 5). Pull fire out of opening until access to flue pipe is gained. Loosen worm drive clip and pull flue pipe away from fire.

3. Control replacement

Perform step (1). Disconnect gas supply from fire. Unscrew burner pipe, pilot pipe and thermocouple and remove from the control. Disconnect spark ignition lead from spark electrode by pulling. Unscrew locknut from mounting bracket and remove control. Replace control and repeat above operations in reverse.

4. Burner replacement

Perform step (1). Disconnect gas supply. Unscrew the screw that attaches the pilot assembly to the burner. Remove the locknut from the injector assembly. Then remove the two screws, which attach the burner to the radiant housing. Remove the burner. Replace burner and repeat above operations in reverse.

5. Burner injector replacement

Perform step (1). Disconnect gas supply. Remove the locknut from the injector assembly. Disconnect burner pipe from control tap and remove pipe/injector. Replace pipe/injector and repeat above operations in reverse.

6. Thermocouple replacement

Perform step (1). Disconnect gas supply. Disconnect thermocouple from control tap. Remove screw and retaining flange from pilot assembly. Remove thermocouple. Replace thermocouple and repeat above operations in reverse.

7. ODS / pilot replacement

Perform step (1). Disconnect gas supply. Disconnect pilot pipe from control tap. Remove screw and retaining flange from pilot assembly. Remove ODS / pilot. Replace ODS and repeat above operations in reverse.

8. Radiant replacement

Perform step (1). Remove fixing screws from the radiant retainer – Fig 7, lift off retainer. Remove and replace radiants, repeat above operations in reverse.