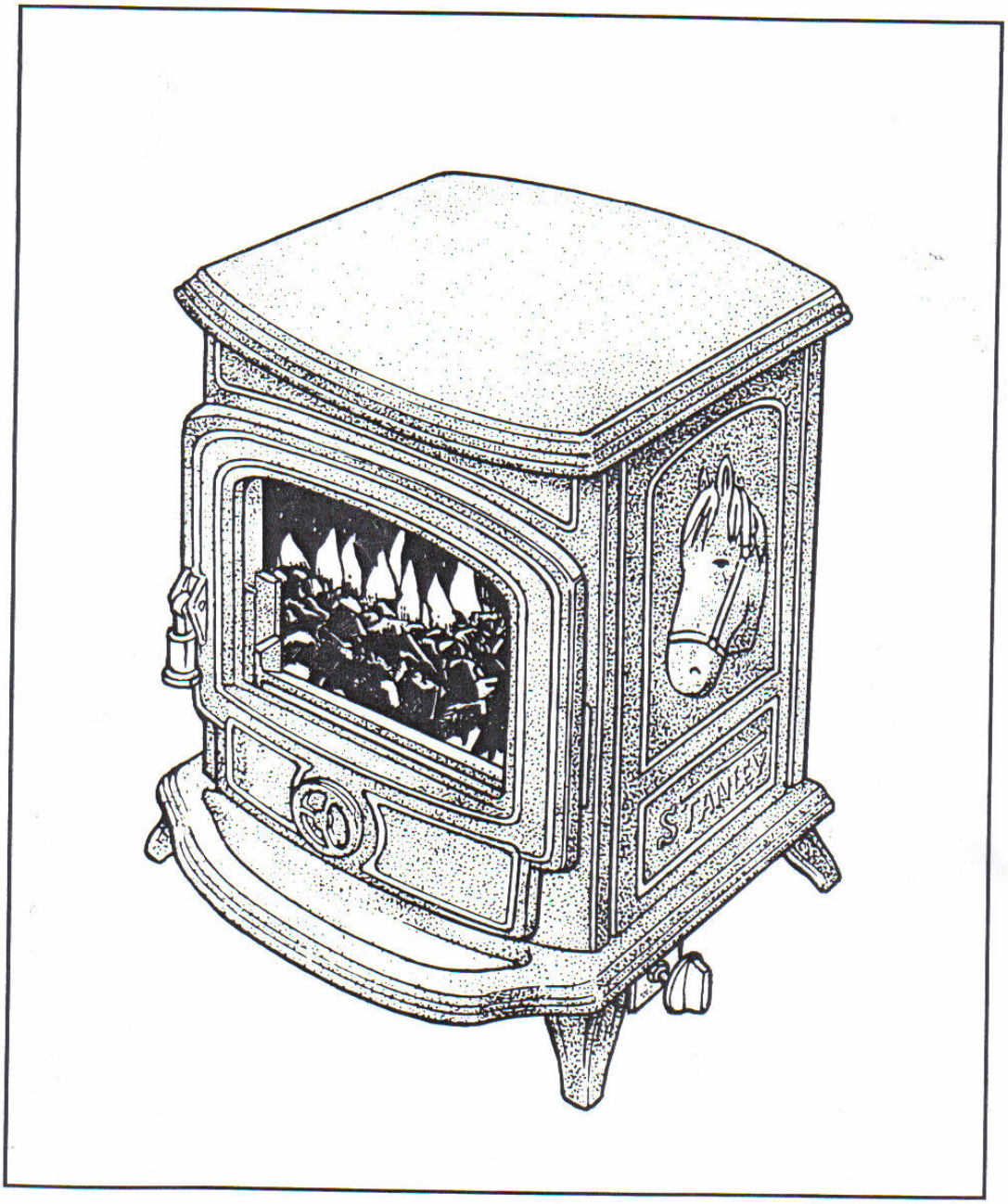
STANLEY

Shire Gas Stove



INSTALLATION AND OPERATING INSTRUCTIONS

TABLE OF CONTENTS

GENERAL

WARNING: Installation, commissioning, repair and maintenance should only be undertaken by a qualified service technician, and installer.

Any adjustments undertaken by unqualified individuals will void the product warranty and may result in property damage or injury.

Thank you for buying a Stanley Shire Gas Stove. The room heater and vent system should be inspected before use and at least annually. More frequent cleaning may be required due to excessive lint from carpeting, matting material, etc. It is imperative that control compartments, burners and circulating air passageways of the room heater be kept clean.

When installing, operating and maintaining your Stanley Shire Gas Stove, respect basic standards of safety. Read these instructions carefully before commencing installation or attempting to operate your stove. Failure to do so may result in damage to property or personal injury and may void the product warranty.

Consult with your local building code agency and insurance representative before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections.

CAUTION: This appliance must be vented to the outside. The installation must conform with local codes or in the absence of local codes, with the national fuel gas code. In the U.K. install in accordance with the requirements of the Gas Safety (Installation and Use) Regulations 1984 (as amended), Building Regulations and the Building Standards (Scotland) (Consolidation) regulations and relevant parts of the following current British standards and codes of practice:

BS6891 - Installation of pipework

BS5440 part 1 1990 - Flues

BS5440 part 2 1989 - Ventilation

BS5871 part 1 - Installation of gas fires

BS6461 - Codes of practice for factory made insulated chimneys.

BS8304 - Solid fuel appliance flue system

BS5482 part 1 1979 - LPG installation.

In the Republic of Ireland install in accordance with the Building Regulations 1991 Technical Guidance Document J and with the relevant parts of the following Standards:

ICP 3 1989 - Domestic installation for manufactured and natural gas (addition 2)

IS327 1990 - Domestic Installation using liquidified petroleum gases (addition 2)

BS5871 1980 (1983) : Code of practice for the installation of gas fires and convectors.

LOCATION

CAUTION: Allow adequate clearances for stove operation and annual servicing e.g. burner removal and injector removal.

After removing the stove from it's packing choose a suitable location. There are many conditions to be considered when selecting the location for your Shire Gas Stove.

NOTE: This appliance must not be installed in a room or space which contains either a bath or a shower or in a sleeping room.

a. Connection to a proper venting system.

b. Provision of a suitable non-combustible hearth.

c. Position in area to be heated - central locations are usually best.

d. Allowances for proper clearances to combustible materials.

e. Obstruction in ceilings, upper floor or roof for example, ducting, plumbing, electrical fittings, wiring and overhead fixed furnishing etc.

f. This appliance must not be installed in a room or space which contains either a bath or a shower

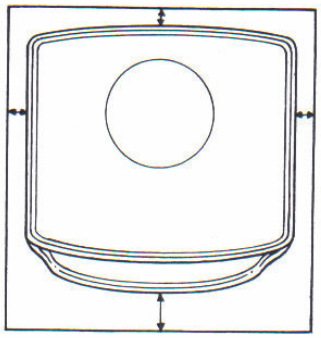
g. Adequate circulation of convected air.

h. Allowances for sufficient space for cleaning and servicing

i. Provision of a continuous supply of adequate combustion air.

j. For safety, and to avoid draughts, avoid locations close to an exit.

HEARTH CONSTRUCTION



The hearth should be constructed using masonry or non-combustible material and should be level and strong enough to hold the weight of the appliance extending to at least the front and sides of the stove.

PRE-INSTALLATION ASSEMBLY

Before installing the appliance carry out the following pre-installation assembly:

1. Open the fire door (item 9), and remove the package of ceramic coals and barrels.

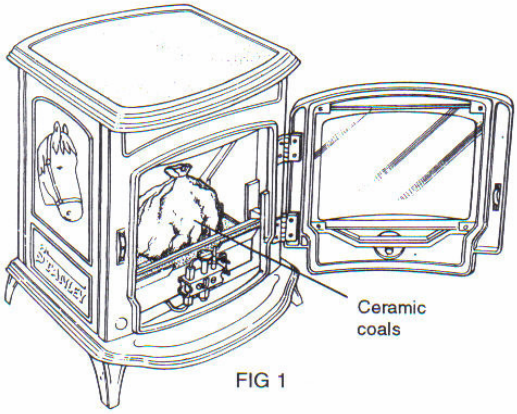


FIG 1

2. In the pallet you will find a draught hood and spigot (items 17& 18) take the draught hood (item 17) and screw to the back of the stove as per fig. 4

FIG 2

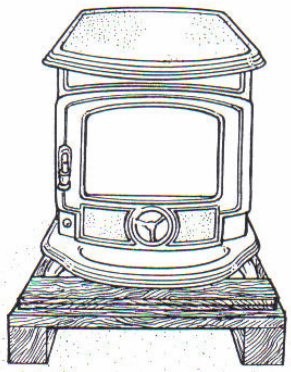
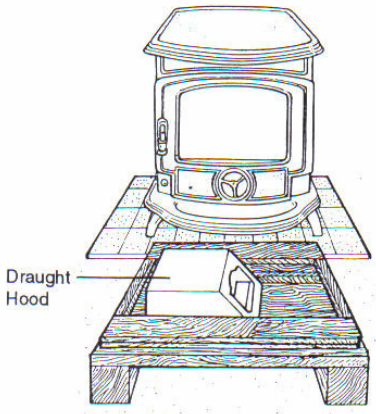


FIG 3



3. This stove may be connected to either a top or rear exit by simply switching the orientation of the flue spigot (item no.18) see fig 5, 6, 7.

FIG 4

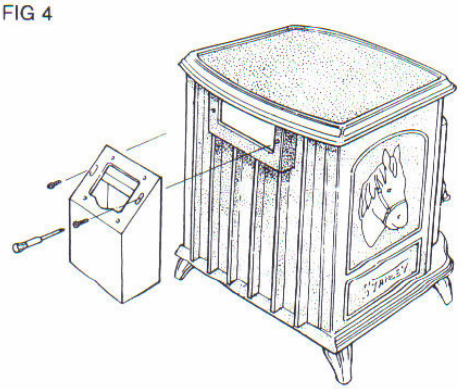


FIG 5

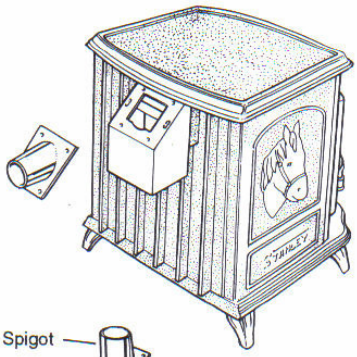


FIG 6

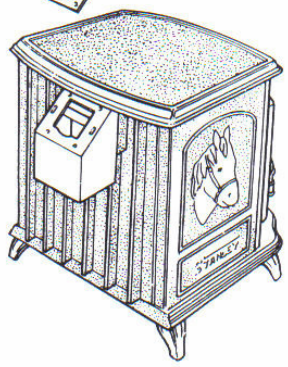
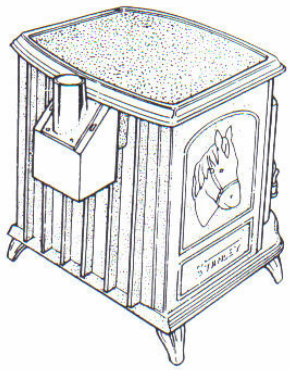
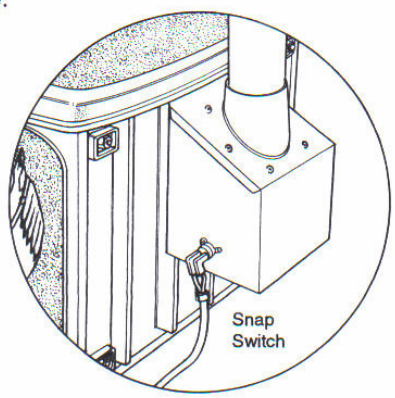


FIG 7



4. Connect the leads to the vent safety shut off switch located on the right hand side of the draught hood (item 17) looking from front of stove.

FIG. 8



5. Position stove in it's chosen location and connect to the chimney/venting system.

INSTALLATION OF PIPEWORK

MATERIALS

Materials used for installation work should be fire resistant and gas tight and should conform to the following standards or their equivalent:

1. Ferrous Materials
   - BS 1387 Steel Tubes
   - BS 1740 Steel Pipe Fittings
   - BS 5292 Jointing Materials
2. Non-Ferrous Materials
   - IS 238 Copper Tubes
   - BS 4127 Stainless Steel Tube
   - BS 219 Solder
   - IS 239 Compression Tube Fittings
   - BS 1552 Plug Valves

Note: Plastic pipe should not be used for internal gas pipework.

Pipe Sizing and Pressure Loss

The maximum permitted pressure loss, under full load, between the meter and any appliance should be less than 1 mbar. Where pipes are to be buried or become otherwise inaccessible, it may be advisable to allow for future extensions when sizing pipes.

PIPEWORK

Through load-bearing or cavity walls, or solid floors or ceiling, pipes should be sleeved. Where pipes pass through a cavity wall, sleeves should be continuous. Pipes should not be run along the cavities of cavity walls. No joints should be sited within a sleeve. The annular space between sleeve and pipe should be sealed with a suitable material e.g. non-setting mastic sealant.

TABLE 1

FIG. 9

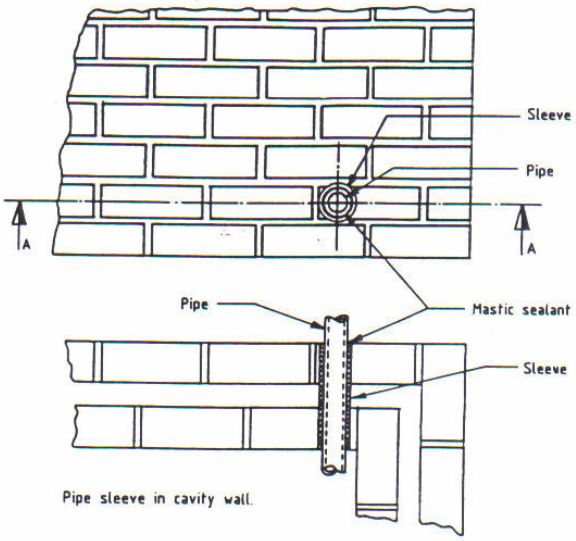
Maximum interval between pipe supports (light gauge copper pipes)

Nominal Size	Interval for Vertical Runs	Interval for Horizontal Runs
mm	m	m
up to 15	2.0	1.2
22	2.5	1.8
28	2.5	1.8
35	3.0	2.5
42	3.0	2.5
54	3.0	2.7

Other Walls or Floors

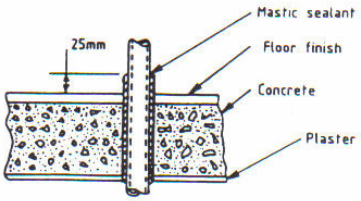
Where there is a likelihood of corrosion or abrasion, the pipes should be suitably wrapped or otherwise protected.

FIG. 10



Pipe sleeve in cavity wall.

FIG. 11



Pipe sleeve in concrete ceiling or floor

FIG. 12

BURIED PIPEWORK

All buried pipework should be adequately protected against corrosion, in a manner approved by the gas undertaking. Where necessary, condensate drains or blocks should be fitted. Pipes less than 12mm internal diameter should not be buried. All buried pipework should be gas tight before being covered. Provision should be made where necessary to allow for expansion and contraction of the buried pipe, e.g. where gas pipes are laid close to heating system pipes

External Buried Pipework

External pipework should conform to the relevant parts of IS 265 on Installation of Gas Service Pipes.

Internal Buried Pipework

The minimum depth of cover is 25mm of crack-free concrete. Pipes should not be buried in floors with underfloor heating.

Pipes in Ducts

Any fire-barriers disturbed should be replaced. The duct should be ventilated in accordance with BS : CP 413 : Ducts for Building Services. Provision may have to be made for thermal expansion or contraction. Gas pipes should not be laid closer than 25mm to adjoining pipes to allow for access.

Bonding and Electricity Supplies

When a pipe is laid in close proximity to an electricity cable there should always be sufficient distance to eliminate the possibility of an arc occurring between the electricity supply and the pipe. Cross bonding of gas with other services should be provided in accordance with the National Rules for Electrical Installations.

If an existing supply is to be broken a temporary continuity bond should be fitted before the supply is broken and not removed until metallic continuity is permanently re-established.

Sizing of Gas Supplies and Meters

When a new installation is planned, or an extension to an existing one, it is essential that the meter and the pipework be of adequate size. The installation of an additional appliance may require a larger capacity meter, or that an existing supply be increased. The fitter should check that the existing service meter and pipework is capable of supplying the additional load before connecting a new appliance.

Connect the manometer to the pressure test point of the meter outlet, or other convenient point eg. burner injector. Note, if a meter governor is fitted which has a test nipple, it will be necessary to make a temporary connection between the nipple and the meter test nipple outlet on the Tee. It is necessary to take this action or the governor will act as a non-return valve and the pipework between the governor and meter control will have to be tested using leak test solution.

Pressurise the installation until a pressure of 30 mbar is registered on the manometer.

Allow one minute for temperature stabilisation. Leave system under test for two minutes and check pressure drop if any. If the pressure drop exceeds that in Table 2 the leak should be located and repaired.

TABLE 2

Maximum permissible pressure loss during 2 min test period for typical existing installation

Meter badged capacity Volume per hour	Maximum pressure loss mbar
G4 or 6 m/h	3.5
45, 100 or 200 cf/h	2.2
125, 240 or 350 cf/h or G6	1.3
400 cf/h or G10	0.4

FIG 13

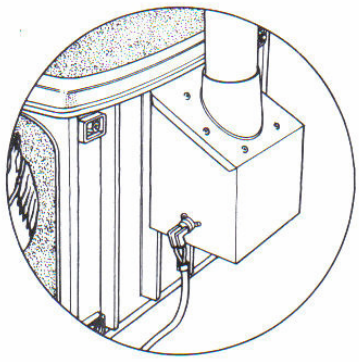
Rectify any leaks and repeat test. When satisfactory, purge the installation.

The extension should be tested before being connected to the existing pipework. The extension should then be connected to the existing pipework and the connection tested with leakage testing solution when subjected to the available gas pressure.

CHIMNEY'S / VENTING

Venting system should be of approved double skin pipe. This appliance is equipped with a safety control system (located on the side of the draught hood) designed to protect against improper venting of combustion products.

FIG 14



WARNING: Operation of this appliance when not connected to a properly installed and maintained venting system or tampering with the vent safety shut-off system can result in carbon monoxide (CO) poisoning and possible death.

IMPORTANT

Due to the high efficiency and low flue gas temperature in this appliance it is important to connect it to a well sealed and efficient venting system capable of registering a negative pressure while the stove is in operation.

The most efficient venting systems are the ones with a minimum number of bends and minimal horizontal runs.

The draught hood (item 17) must stay in the same atmospheric pressure zone as the stove.

The stove must be vented to the outside in accordance with the latest edition of the fuel gas code.

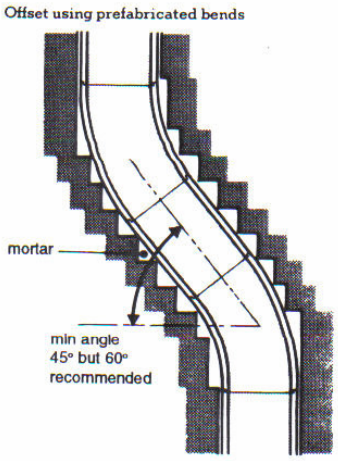
The flue or chimney must not terminate within 600mm or an air vent, ventilation opening or an openable window.

If horizontal runs are necessary in the vent system, they should have at least 1/4" rise per foot of horizontal run. Limit horizontal to their absolute minimum. Use 45 degree bends instead of 90 degree elbows. If connecting to a rear exit configuration the horizontal run should not exceed 300mm from the draught hood (item 17) to the venting or chimney system.

Generally the most efficient chimney for gas is one that is straight, avoids offsets and terminated with a straight-sided pot.

If it is necessary to offset the chimney the recommended angle is 60 deg. to the horizontal and the statutory minimum is 45 deg.

FIG 15



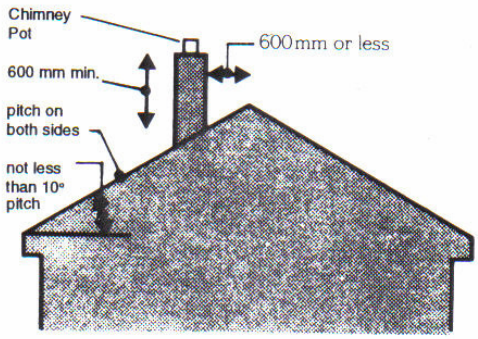
The height of the chimney or flue serving this appliance should not be less than 3 metres and not more than 8.6 metres, measured vertically from the outlet to the top of the flue terminal and having a diameter of not less than 100mm and not more than 127mm.

If connecting to a rear outlet the minimum chimney of flue height should not be less than 4 metres.

Note: Never connect to chimney or flue system serving another appliance.

The height of the chimney above the intersection with the roof with a pitch of not less than 10° to the horizontal on both sides of the ridge may be less than 1m, but not less than 600mm if the chimney is 600mm or less from the ridge. The top of the flue should be terminated by a chimney pot which has the same cross-sectional area as the flue and projects at least 150mm above the chimney.

FIG 16



FLUES

The chimney and flue pipes intended for use with this appliance should be mechanically robust, resistant to internal and external corrosion, non-combustible, and durable under the conditions to which they are likely to be subjected.

INSPECTION AND TESTING OF FLUES

It is essential that every flue system be inspected and tested by the installer upon completion, to ensure that the combustion products are completely discharged to the outside atmosphere.

Open flues should be visually inspected, and a check on their efficiency carried out by introducing smoke at the inlet to the flue. The smoke should be drawn into the flue, not spilling out from the opening nor issuing from any joint.

In certain conditions, there may be spillage of smoke due to inversion caused by the flue being colder than the outside air; in such cases, heat should be introduced into the flue and the test repeated.

After installation of the appliance, a similar smoke test should be carried out to ascertain that the flue and air inlet are unobstructed and that their installation and sealing have been carried out.

A guide to the correctness of installation is the appearance of the flame within the combustion chamber of the appliance ; a clear, well defined flame generally denotes that the flue and airway are unobstructed.

USE OF EXISTING FLUES AND CHIMNEY'S

An existing flue pipe or chimney that has proved to be satisfactory when used for solid fuel can normally be used for a gas appliance provided that its construction and condition are acceptable. Flues that have proved to be unsatisfactory, particularly with regard to down draught, should not be used for venting gas appliances until they have been examined and any faults corrected. If there is any doubt about an existing chimney a smoke test to B.S. 5440: Part 1 should be carried out.

Before connecting this appliance to a chimney or flue pipe which has previously been used with another fuel, the chimney or flue pipe should be thoroughly swept.

All register plates, restrictor plates, damper etc. which could obstruct the flue at a future date should be removed before connecting this appliance.

Where a chimney is not to be lined a suitable void should be provided at the base to contain any debris which might fall from the inside wall, so as to prevent that debris from obstructing the appliance flue outlet. (Removal of debris should be facilitated by the provision of an access door). The void should have a depth of not less than 250mm below the appliance connection.

Flues require a suitable external terminal which should be designed to permit easy ingress of combustion products whilst providing protection

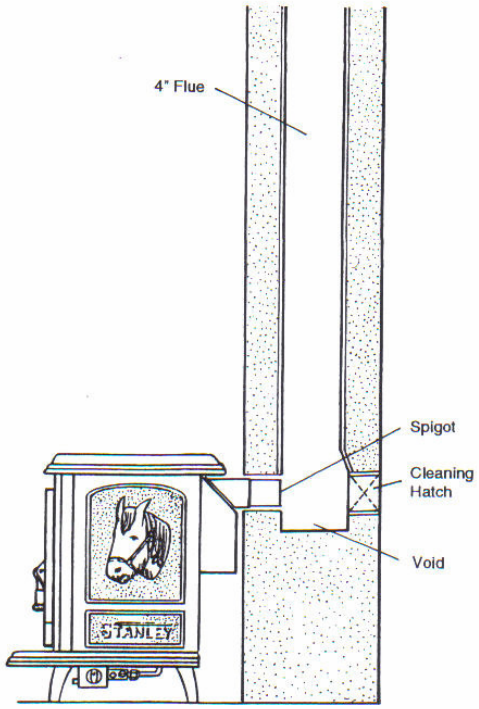


FIG 16 A

against the entry of rain, birds, and other foreign matter into the flue system. Flue pipes and accessories such as clips and stays should not be made of unprotected mild steel or other materials which are likely to corrode.

FLUE LINERS

If connecting to an existing chimney with a flue diameter of more than 127mm it is necessary to line the flue.

Where it is necessary to line an existing chimney, a liner approved by the local gas authority should be used.

The liner should be secured at the top and bottom by sealing the clamping plates, and an approved terminal used at the top.

It is essential that every flue system be inspected and tested by the installer upon completion, to ensure that the combustion products are completely discharged to the outside atmosphere.

FIG 17

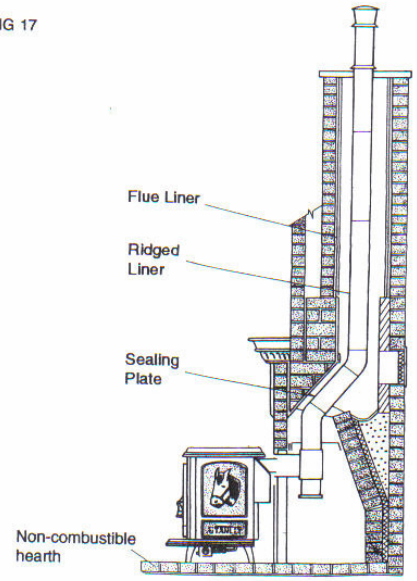
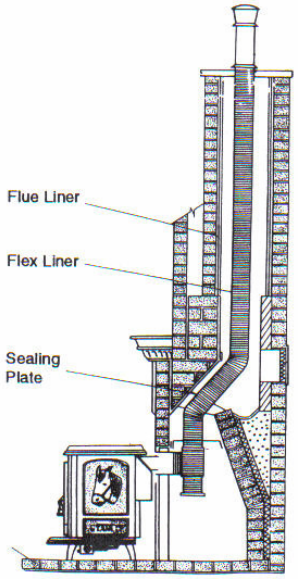


FIG 18



SUITABLE MATERIALS

* Mineral fibre cement pipes conforming to I.S. 120, B.S. 567 or B.S. 835.
* Sheet metal conforming to B.S. 715
* Insulated metal chimneys conforming to B.S. 4543 (a galvanised finish is not suitable for exterior use). Where twin walls pipes are of sheet metal construction the length of pipe located externally should not exceed 1m unless it is readily accessible for renewal.
* Pre-cast concrete chimney blocks, incorporated into the building structure. It is particularly important that the correct connection block be provided at the base of the flue.
* Cast iron or acid resistant vitreous enamelled lined mild steel to B.S. 4 1

SHIELDING OF FLUE PIPES

The outer surface of any flue pipe should not be closer than 50mm to any combustible material. Where twin wall flue-pipe is used the 50mm space may be measured from the external pipe. Flue pipes should:

(a) Be at least 50mm from any combustible material.

(b) Where passing through a wall, floor or roof, be separated from any combustible material by a non-combustible sleeve enclosing an air space of at least 25mm around the flue pipe.

(c) Where passing through a compartment wall or a compartment floor, be cased with non-combustible material with at least half the fire resistance needed for the wall or floor (see Technical Guidance Document B, Fire).

(d) Where a flue pipe passes through a cupboard, roof space or similar space in which combustible materials may be stored, e.g. hot-press, the flue pipe should be protected by a guard that forms an annular space of not less than 50mm around the flue pipe.

BRICK / BLOCK CHIMNEYS

Brick/block chimneys should be lined with:

(a) Clay flue liners with rebated or socketed joints as described in I.S. 51: 1983 Clay Flue Linings and Flue Terminals.

(b) Imperforate clay flue pipes as described in I.S. 106: 1970 Clay Sewer and Drain Pipes.

(c) Any material described in Section 1 for a solid fuel appliance.

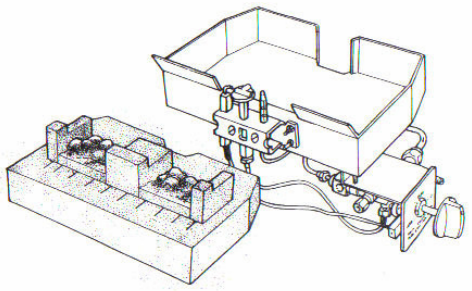
Linings should be fitted with the sockets or rebated uppermost to prevent condsensate running out and to prevent any caulking material from being adversely affected. Joints between the liners and brickwork should be sealed and filled with mortar.

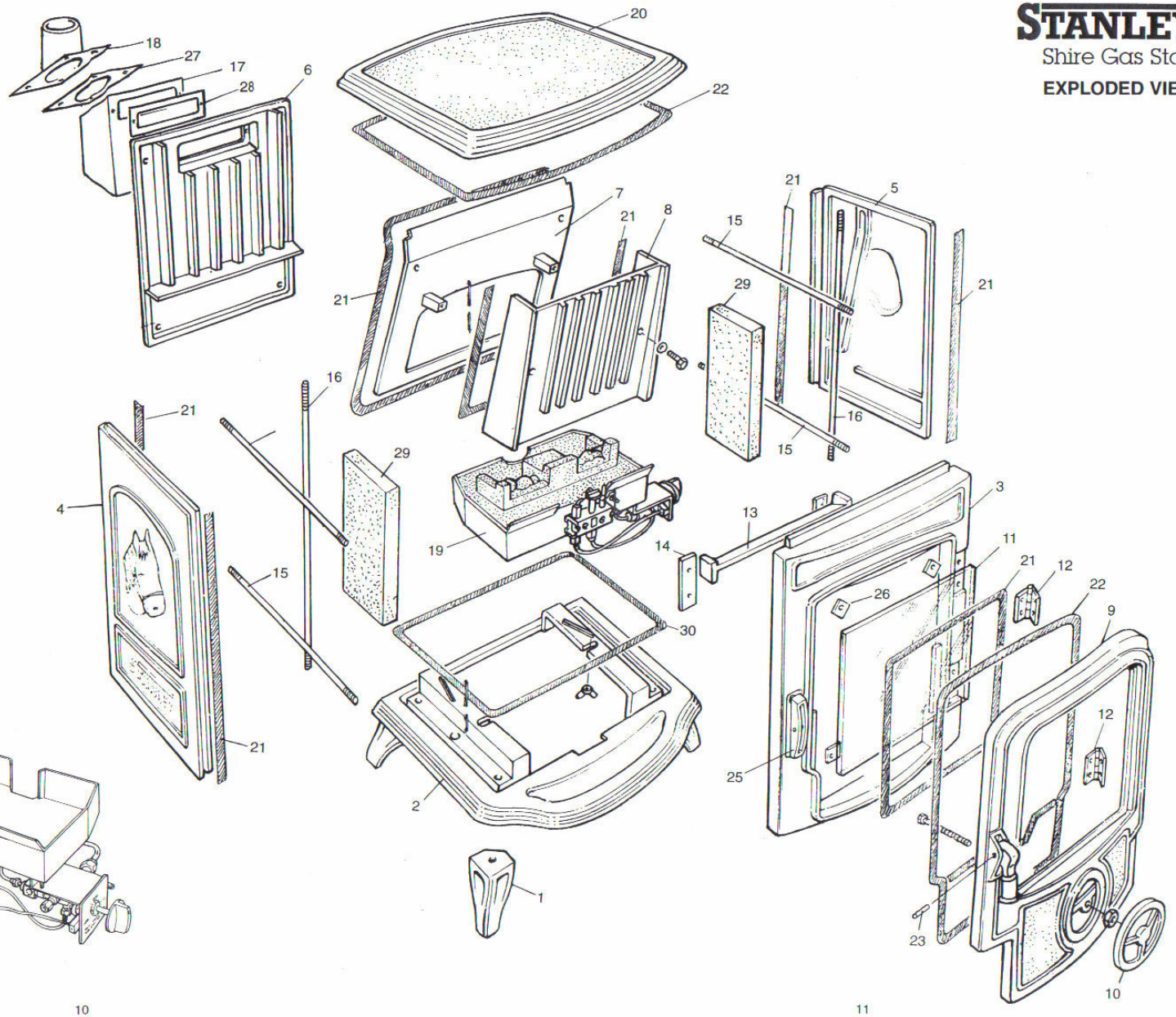
FLUE BLOCK CHIMNEYS

Flue blocks should be as described in BS 1289: Flue blocks and masonry terminals for gas appliances: Part 1: 1986 Specification for precast concrete flue blocks and terminals and Part 2: 1989 Specification for clay flue blocks and terminals.

STANLEY
Shire Gas Stove
EXPLODED VIEW

		No. of Items
1.	Leg	4
2.	Base	1
3.	Front	1
4.	Left side	1
5.	Right side	1
6.	Back	1
7.	Inner back baffle	1
8.	Outer back baffle	1
9.	Door	1
10.	Spin valve	1
11.	Door glass	1
12.	Door hinges	2
13.	Fire bar	1
14.	Fire bar clips	2
15.	Horizontal tie rods	4
16.	Vertical tie rods	2
17.	Draught hood	1
18.	Flue spigot	1
19.	Burner assembly	1
20.	Hob	1
21.	Flat sealing tape 13x3 self adhesive	
22.	Door & hob sealing rope 12mm round	
23.	Pin	1
24.	Door latch	1
25.	Door latch receiver	1
26.	Door glass clips	4
27.	Spigot gasket	1
28.	Draught hood gasket	1
29.	Ceramic side panels	1
30.	Base Gasket	1





FLEXIBLE FLUE LINERS

A flexible flue liner may be used in a chimney if:

(a) The liner complies with the requirements of BS 715: 1989 Specification for metal fluepipes, fittings, terminals and accessories for gas-fired appliances with a rated input not exceeding 60kW.

(b) The chimney -

(i) was built before the coming into operation of Building Regulations.

(ii) is already lined or constructed of flue blocks as recommended in the Technical Guidance Document.

FACTORY-MADE INSULATED CHIMNEYS

Factory-made insulated chimneys should be:

(a) Constructed and tested to meet the relevant recommendations given in BS 4543 Factory-made insulated chimneys, Part 1: 1990 Methods of test, and Part 2: 1990 Specification for chimney with stainless steel flue linings for use with solid fuel fired appliances.

(b) Installed in accordance with the manufacturers' instructions or to meet the relevant recommendations of BS 6461: Installation of chimneys and flues for domestic appliances burning solid fuel (including wood and peat): Part 2: 1984: Code of practice for factory-made insulated chimneys for internal applications.

A factory-made insulated chimney should not:

(a) Pass through any part of the building forming a separate compartment, unless it is cased in non-combustible material giving at least half the fire resistance of the compartment wall or floor (see Technical Guidance Document B, Fire).

(b) Be placed with its outer wall nearer to combustible material than a distance x.

(c) Pass through a cupboard, storage space or roof space, unless it is surrounded by a non-combustible guard at a distance of at least x from the outer wall of the chimney.

For (b) and (c) above the distance x is to be found by test in accordance with BS 4543 Part 1: 1990.

VENTILATION AND COMBUSTION AIR REQUIREMENTS

The room containing the appliance must have a permanent air supply capable of delivering 100 sq cm of free air delivery. The vent must either be connected direct to an outside air supply or to adjacent rooms having a permanent vent to the outside.

If there is another combustion appliance fitted in the same room or adjacent room it will be necessary to refer to BS 6714 and BS 5440: Part 2 to calculate the additional air supply.

All materials used in the manufacture of air vents should be such that the vent is dimensionally stable and corrosion resistant.

The effective area of any vent should be ascertained before installation. The effect of any gauze or screen should be allowed for when determining the effective area of any vent.

Air vents direct to the outside of the building should be located so that any air current produced will not pass through normally occupied areas of the room.

Air vents in internal walls should not communicate with bedrooms, toilets, bathrooms or kitchens. An air vent outside the building should not be located less than 600mm away from any part of any flue terminal.

Air vents traversing cavity walls should include a continuous duct across the cavity. The duct should be installed in such a manner as not to impair the weather resistance of the cavity.

Joints between air vents and outside walls should be sealed to prevent ingress of moisture. Existing air vents should be of the correct size and unobstructed for the appliances in use.

If there is an air-extraction fan fitted in the room or adjacent rooms where this appliance is, additional air vents will be required to eleviate the possiblity of spillage of products of combustion from the appliance flue when the fan is in operation. Refer to BS 6714 and BS 5440.

Where such an installation exists, a test for spillage should be made with the fan or fans in operation at full rate.

If spillage occurs when the fans are in operation, an additional air vent of sufficient size to prevent spillage should be installed.

CONNECTION TO GAS SUPPLY

NOTE: Please check with your local Gas Company as to who is authorised to make gas connections.

Check with local gas authorities having jurisdiction in your area whether the use of copper pipe is acceptable. NEVER use galvanised or plastic pipe in the gas supply line.

The gas control is located at the bottom right hand side of the unit.

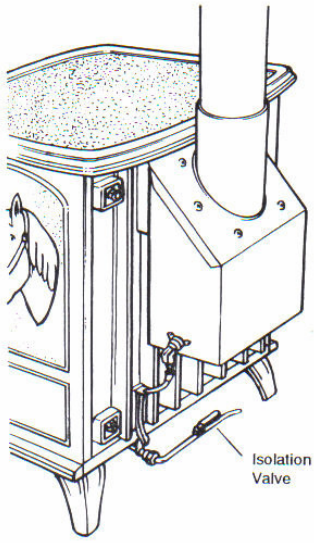
Check that the mains gas supply pipe is adequately sized and capable of supplying enough gas to the appliance for maximum performance.

IMPORTANT

Always have a shut off valve fitted to the main gas supply line as close as possible to the appliance in order to allow for isolation during servicing and supply line pressure testing. See fig. 19.

WARNING: Before connecting the stove make sure the gas supply pipe is clear of grit and debris as this will cause blockage within the stove control, pilot burner, injectors and pipework. Failure to do so may void product warranty

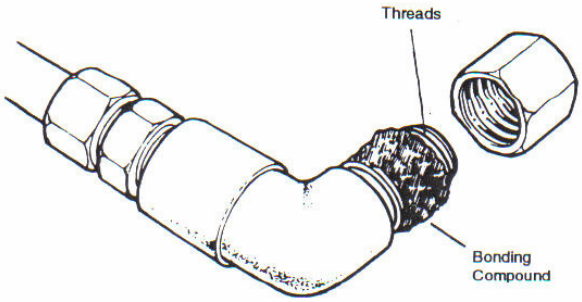
FIG 19



WARNING:

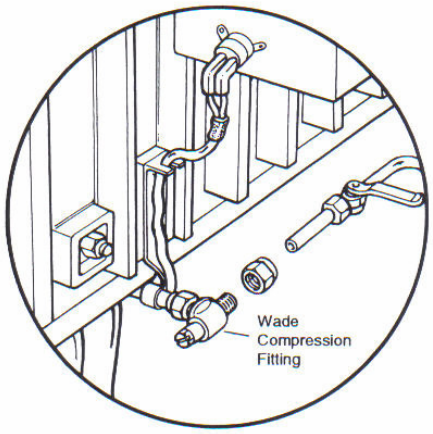
To avoid pipe compounds from entering into the gas train, do not apply compounds to the first two threads at the tip of the gas connection.

FIG 20



A 8mm Wade Compression fitting is located at the rear of this appliance inside the right hand leg. It must be connected to an approved gas connection.

FIG 21



WARNING

Only connect to the gas as indicated on the rating plate.

GAS PRESSURE REQUIREMENTS

Correct gas pressure and proper gas supply line pipe sizing is important for the successful performance of this appliance. Make sure that the plumber or gas supplier checks the gas supply line and gas pressure at installation.

Flexible pipes should not be used unless specified by the Gas Authority having jurisdiction in your area.

CAUTION:

The appliance must be disconnected from the gas supply system during any pressure testing of the system at pressures in excess of 1/2" PSI.

NOTE:

Improper gas pressure can affect stove performance flame colour or cause pilot outage.

Pressure Setting From Cold
Natural Gas Mains Pressure = 8"/20mbar
L.P.G. Mains Pressure = 14"/34.87mbar

Working Pressure Maximum Setting
Natural Gas = 7"/17.43mbar
L.P.G. = 13"/32.37mbar

Manifold Pressure Maximum Setting
Natural Gas = 6"/13.14mbar
L.P.G. = 12"/29.88mbar

Manifold Pressure Minimum Setting
Natural Gas = 2"/4.8mbar
L.P.G. = 7"/17.43mbar

	BTU's/KW
Max. Input Natural Gas	25,000 / 7.3kw
Max. Output Natural Gas	18,000 / 5.3kw
Max. Input L.P.G.	24,000 / 7kw
Max. Output L.P.G.	17,000 / 5kw
Min. Input Natural Gas	11,900 / 3.5kw
Min. Output Natural Gas	7,750 / 2.3kw
Min Input L.P.G.	11,290 / 3.3kw
Min Output L.P.G.	7,200 / 2.1kw

PLACEMENT OF COALS

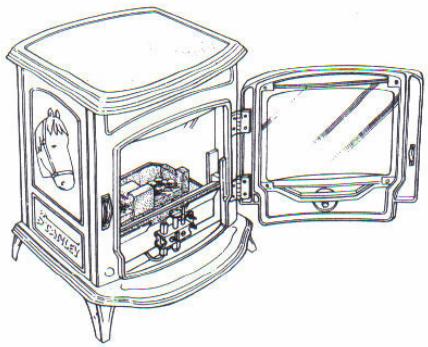
WARNING: The ceramic coals supplied with this stove are extremely durable and long lasting when fitted properly. They are, however, very delicate and can be easily damaged if they are not handled very carefully.

Handling damage to the ceramic coals is not covered by warranty.

1) Before positioning the coals in the combustion chamber. Check for dust particles and grime. Vacuum if necessary. Position the coals as per fig 22, 23, 24, 25, 27, 28. Incorrect placement will effect the performance of the stove. Dust off the inside of the door and glass using a clean dry cloth.

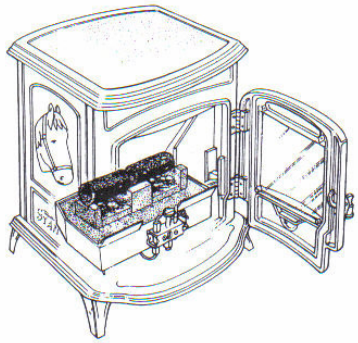
Note: Do not clean the burner with a sharp object as the ceramic may get damaged.

FIG 22



2) Lay the two barrels on top of the three ceramic blocks of the burner with the hole at front and vertical. Position barrels as far forward as possible.

FIG 23



3) Lay the first row of coals on the fire bar (item 13) and against the barrels making sure that the coals are at least one inch away from the burner ports.

FIG 24

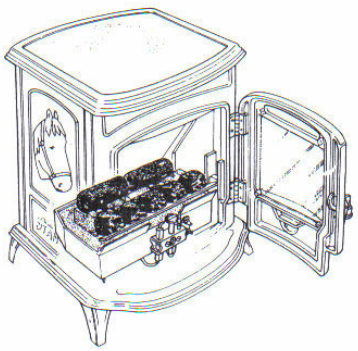
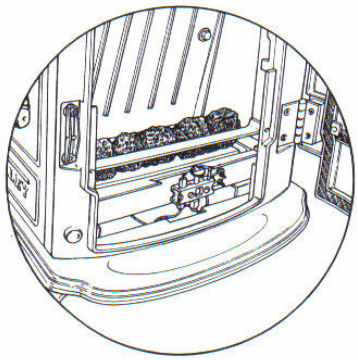
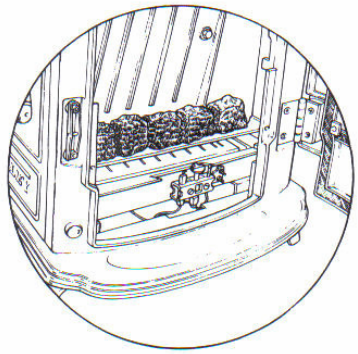


FIG 25



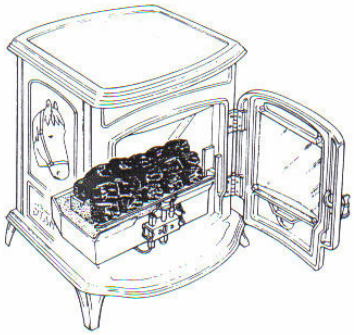
WRONG

FIG 26



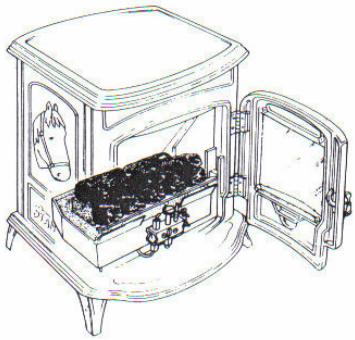
RIGHT

FIG 27



4) Lay the second row of coals on top of first row and as far against the barrels as possible.

FIG 28



5) Lay the third row of coals on top of second row and over the barrels and against the back plate.

IMPORTANT: Leave an air space around each coal to allow easy flow of products of combustion, too much impingement of flame on coals could cause sooting.

LIGHTING

First Lighting.

Purge air from the supply line as follows:

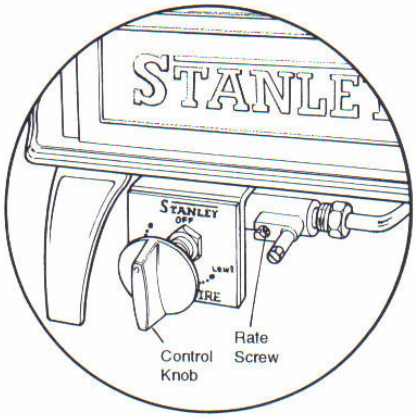
(a) Open main shut-off valve. Unscrew main pressure test point. Leave open inlet test screw until gas comes.

(b) When gas comes tighten inlet screw immediately.

WARNING: Do not purge the system near a naked flame or hot surface.

Press in the control knob all the way. Turn anti-clockwise until you hear a clicking sound. Keep control knob pressed for 15-30 seconds. Depress control knob. If the pilot fails to light repeat this action.

FIG 29



WARNING: Do not operate the stove with it's door open. Make sure the door latch is fully locked. Keep Door Spin Valve Closed.

During the first light up period an odour will rise from the stove, this is due to the materials in the stove drying out and curing. It is advisable to open a window or door to give extra ventilation to the room until the odour has gone.

BURNER LIGHTING

1) With the pilot light firmly established turn the control knob anti-clockwise to the high position. When the main burner is firmly established adjust control knob anti-clockwise to a lower setting if required.

LEAK TESTING

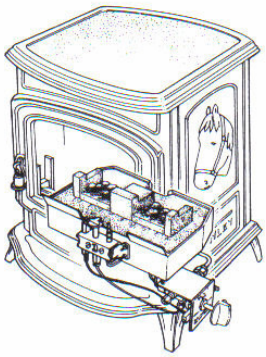
Never use a naked flame.
Check each joint or connection.
Check field made joints.
Check all joints on the valve and control body.

Methods:

1. Use a soapy water solution.
2. Use an approved leak testing spray.
3. Electronic sniffer.

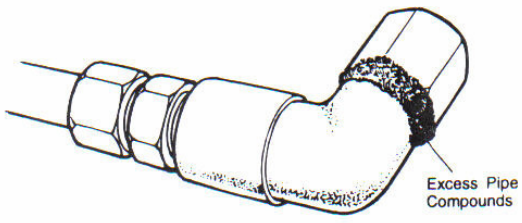
CAUTION: If using a soapy water solution for leak testing DO NOT spray solution onto control body.

FIG 30



NOTE: Clean off any excess pipe compounds from connections as excessive pipe compounds can set off some electronic sniffers.

FIG 31



SPILLAGE TEST

When the stove is installed carry out a spillage test as outlined in the following procedure:

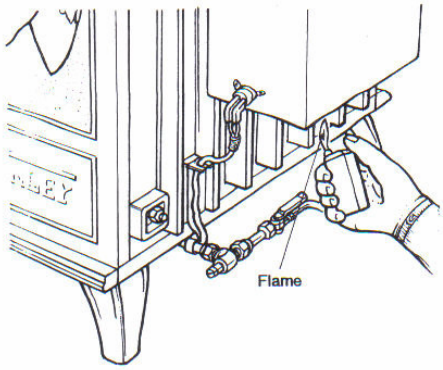
a) Operate stove for a minimum of 5 mins. at maximum setting.

b) Run all other air using appliances in the home at full setting e.g. extraction fans, clothes dryers and furnaces etc.

c) Close windows and external doors.

d) With either a smoke match or lighter flame, run around the edge of the draught hood entrance.

e) If the flame or smoke turns and pulls into the draught hood, there is no spillage.



PILOT FLAME

NOTE: The pilot flame should be a steady blue flame which has contact with the upper 3/8" of the thermopile.

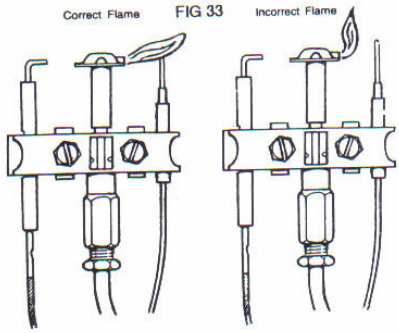


FIG 33

BURNER AIR ADJUSTMENT

Correct Flame Picture

Lazy flame reaching to about 1" across thermopile having a bright whitish colour with a blue tinge.

Incorrect Flame Picture

Long yellow darkish flame impinging on upper baffle.

WARNING: Do not set stove with a yellow darkish flame

MAINTENANCE

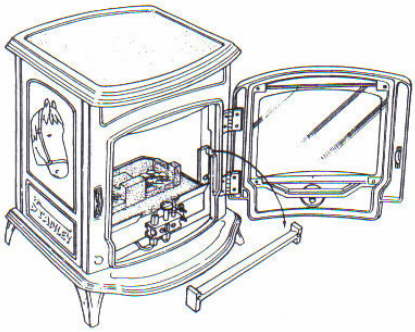
CAUTION: Maintenance of this stove should only be carried out by a qualified Gas Engineer.

CAUTION: Isolate the main gas supply before carrying out any maintenance.

Removal of Burner

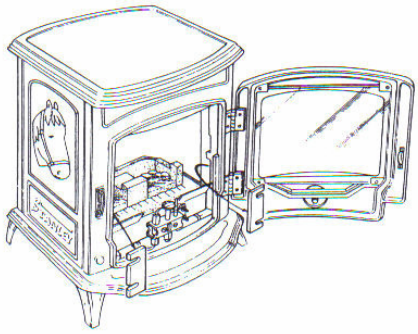
1) Shut off gas supply at the shut off valve.
2) Open door (item 9)
3) Carefully remove the coals.
4) Remove the fire bar (item 13) – (see fig 34)

FIG 34



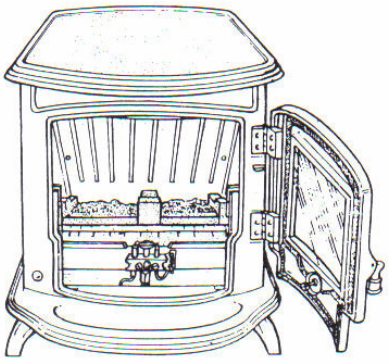
5) Slacken the four 1/4" hex bolts holding the fire bar clips (item 14) – (see fig. 35).

FIG 35



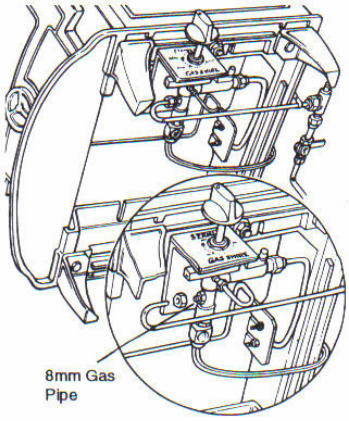
6) Slide out fire bar clips (item no.14) towards the centre of the door opening.
7) Remove the front baffle (item no.8) by unscrewing the two 1/4" hex stainless steel bolts. (see fig 36)

FIG 36



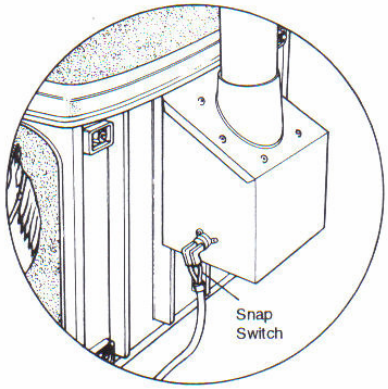
8) Remove the two ceramic side panels (item no.29).
9) Disconnect the 8mm gas pipe at the front of the control under the lip. (see fig 37)

FIG 37



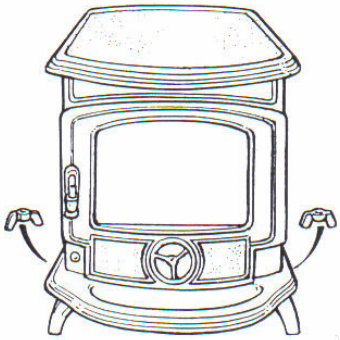
10) Disconnect the two snap switch leads from either the snap switch located on the draught hood or from the interupptor block located at the end of the burner control.

FIG 38



11) Unscrew the two 1/4" wing nuts located on the under side of the stove on the right and on the left. (see fig 39)

FIG 39



12)Carefully lift up the burner assembly complete, starting with the left side and gradually turning the assembly anti-clockwise until the left side of the assembly is facing towards the door opening.

FIG 40

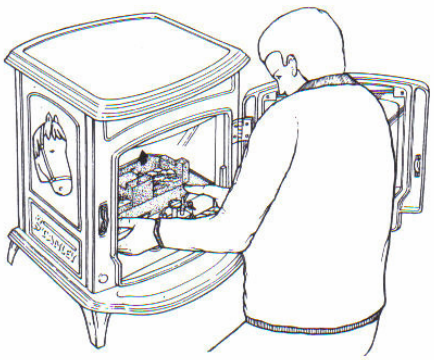


FIG 41

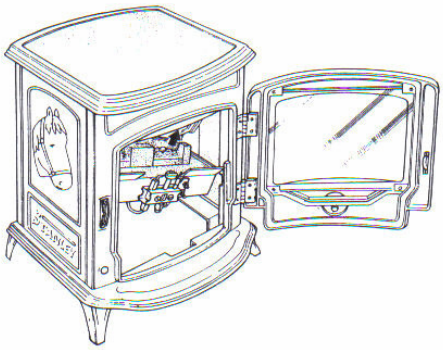


FIG 42

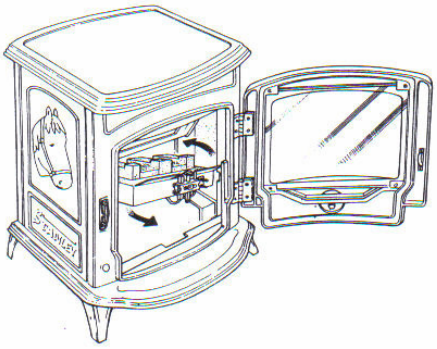
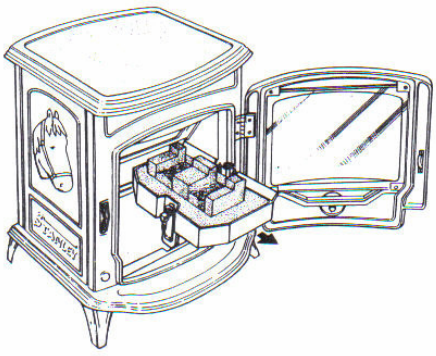


FIG 43

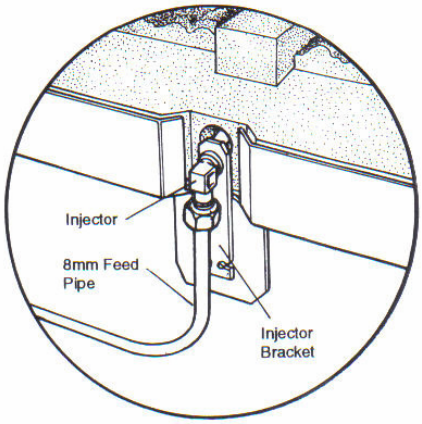


Changing of Burner Injector Orifice

With the burner assembly removed as per fig. 40, 41, 42, 43.

1) Disconnect the 8mm gas feed pipe from the control to injector.
2) Slacken the 8mm gas feed pipe to the injector at the control.
3) Remove the two 5mm nuts holding the retaining bracket.
4) Remove the injector assembly from the ceramic burner inlet.
5) Remove injector sleeve natural gas only.
6) Remove the 13mm gland nut at the burner side of the injector bracket.

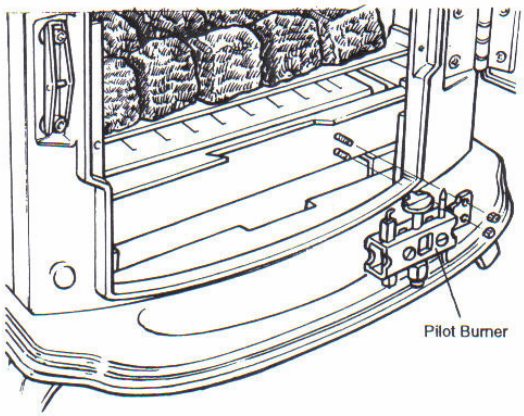
FIG 44



Removal of Pilot Burner

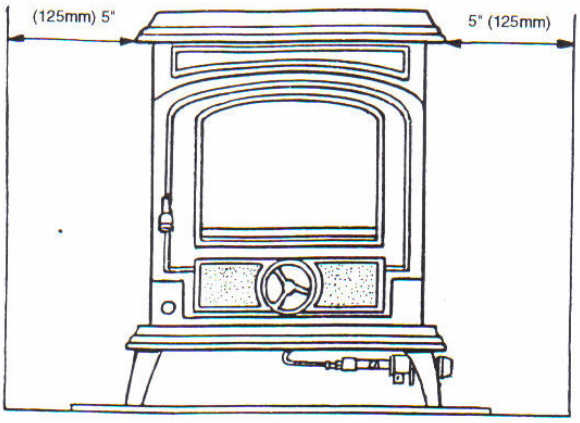
1) Unscrew the two 1/4" slotted head screws from pilot burner.
2) Disconnect the 4mm gas feed pipe

FIG 45



MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

Back wall from draught hood	4"(100mm)
Left side wall looking from front	5" (125mm)
Right side wall looking from front	5" (250mm)
Alcove or mantle from top of unit	18" (459mm)
From corner	5" (125mm)



FLOOR PROTECTION

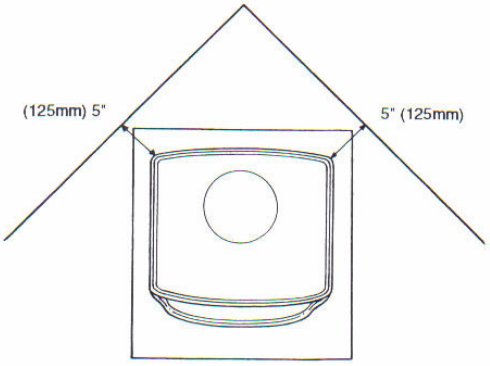
If this appliance is installed directly on carpeting, tile or other combustible material the appliance shall be installed on a metal panel extending at least the full width and depth of the appliance.

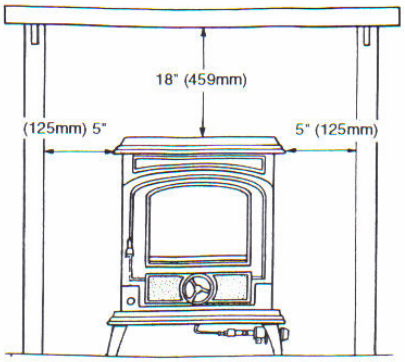
a) Due to high temperatures, the room heater should be located out of traffic and away from furniture and draperies.

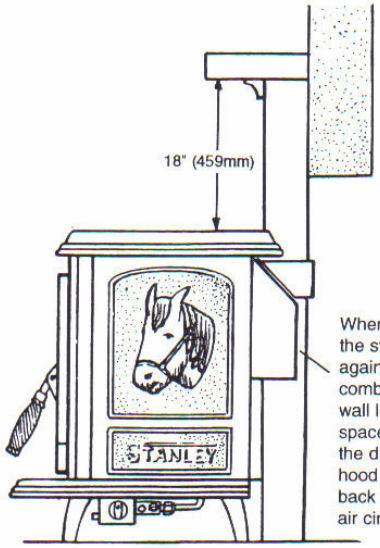
b) Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

c) Young children should be carefully supervised when they are in the same room as the room heater.

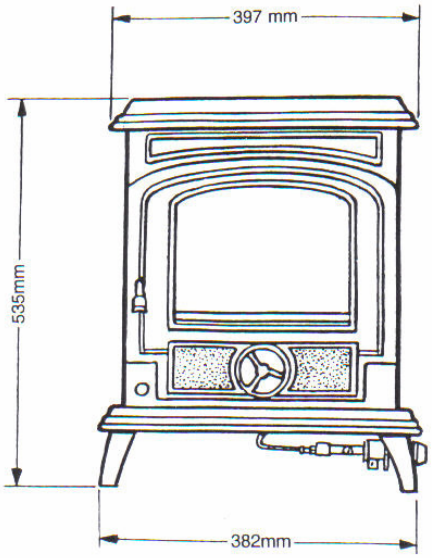
d) Clothing or other flammable material should not be placed on or near the room heater.







When installing the stove against a non-combustible wall leave a 2" space between the draught hood and the back wall for air circulation.



Stove Weight = 138lbs / 62.6 kilos

TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pilot will not light	No gas	Check gas is turned on
	Safety interlock preventing operation	Wait 5 minutes & attempt to relight
	Control knob not fully depressed	Ensure control knob is being fully depressed
	Disconnected Piezo igniter	Connect Piezo cable
	Air in gas lines	Call your qualified service technician
	Insufficient gas pressure	Call your qualified service technician
	Damaged pilot hood	Call your qualified service technician
	Blocked orifice	Call your qualified service technician
	Defective control valve	Call your qualified service technician
	Faulty Piezo igniter	Call your qualified service technician
Pilot lights but goes out when the control knob is depressed	Flame impingement on thermocouple	Adjust pilot flame
	Incorrect position of thermocouple	Call your qualified service technician
	Weak milli volt current	Call your qualified service technician
	Poor electrical contacts	Call your qualified service technician
Burners will not light	Control knob may not be turned to correct position	Turn control knob anti clockwise to a heat output setting.
	Air in gas lines	Call your qualified service technician
	Incorrect inlet pressure	Call your qualified service technician
	Blocked orifice	Call your qualified service technician
	Faulty control valve	Call your qualified service technician
Heater operates normally then goes out within 10 mins.	Blocked flue	Clear blockage
	Insufficient draught leading to the switch activating	Call your qualified service technician
	Defective vent safety switch	Call your qualified service technician
Noise in pilot/burners	Excessive gas pressure	Call your qualified service technician
Draught hood spillage	Chimney or venting system not high enough	Increase height
	Chimney or venting system blocked	Clear blockage
	Leaks in chimney or venting systems joints	Seal joints
	Insufficient air supply when other air using appliances are in operation.	Call your qualified service technician
Flame characteristics:		
Hard sharp flame	Excessive primary air	Reduce air intake
Yellow flame	Insufficient primary air supply	Increase air intake
	Over sized burner orifice	Call your qualified service technician
Lifting flame	Excessive gas pressure	Call your qualified service technician
Small sharp flame	Clogged burner orifice	Call your qualified service technician
	Semi clogged gas supply line	Call your qualified service technician
	Excessively low gas pressure	Call your qualified service technician

WATERFORD

Waterford Stanley (Marketing) Ltd.,
Bilberry, Waterford, Ireland.
Telephone: (051) 75911
Facsimile: (051) 75760

STANLEY