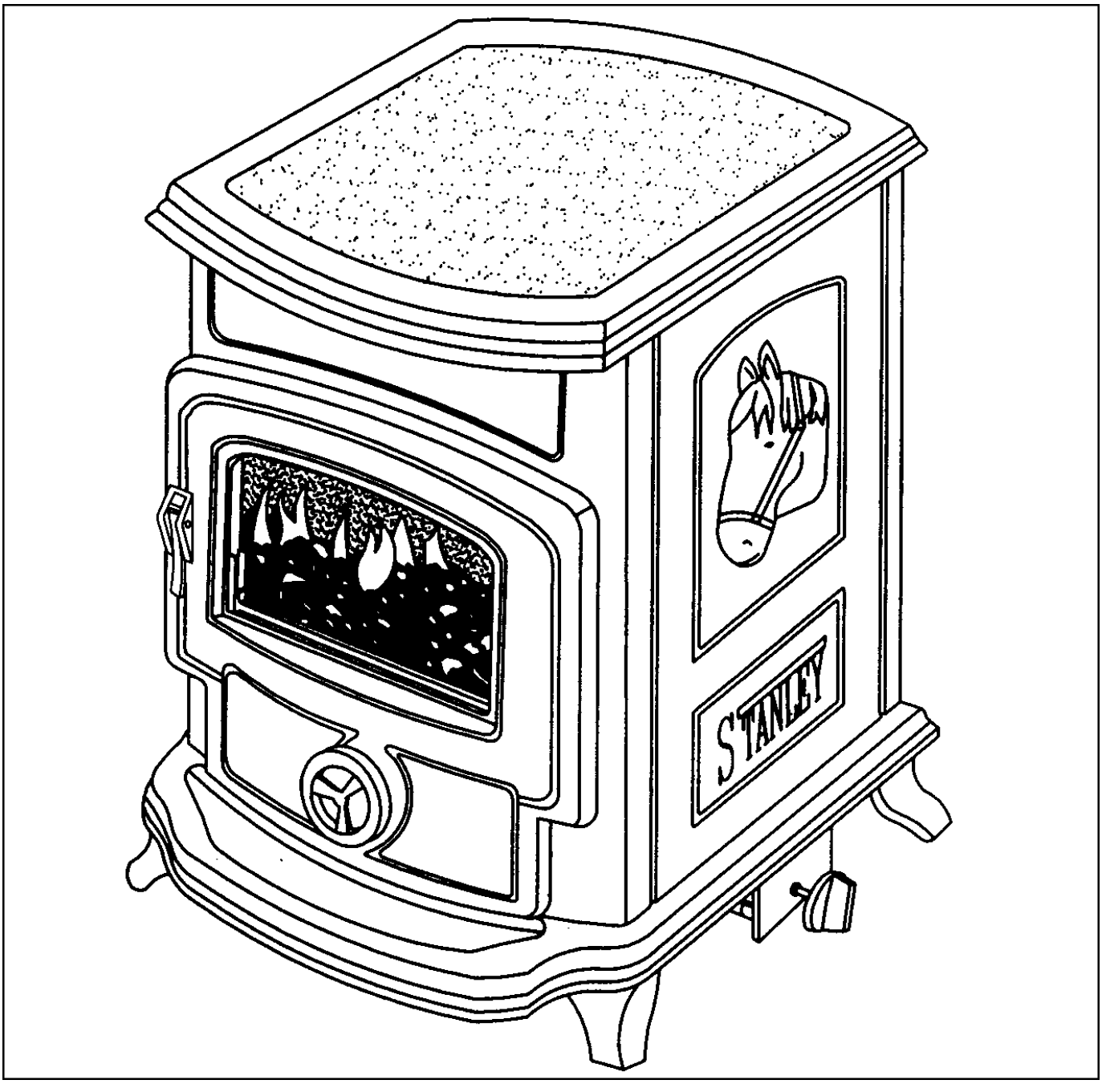
STANLEY

Shire Balanced Flue Gas Stove



REMOTE CONTROL
INSTALLATION AND OPERATION INSTRUCTIONS

To ensure safety, satisfaction and reliable service **this stove should be installed by a suitably qualified and competent person.**

TABLE OF CONTENTS

SHIRE BALANCED FLUE GAS STOVE TECHNICAL DATA

Pressure Setting From Cold
Natural Gas Inlet Pressure = 8"wg / 20 mbar

Product Identification No.: 0063AU5289
Appliance Category: BII_{BS}
Country of Designation: I.E., G.B., F.R., P.T.,I.T. E.S., N.L.,& B.E.

Gas Type
N.G.: I_{2H}, G20, 20mbar/8" wg (I.E. & G.B.)
I_{2E+}, G20 20 mbar/8" wg & G25, 25 mbar/10" wg (F.R. & B.E.)
I_{2L}, G25, 25mbar / 8" wg (N.L.)

Manifold Pressure Maximum Setting
Natural Gas = 7.4"/18.5 mbar

Manifold Pressure Minimum Setting
Natural Gas = 1.1"/2.7 mbar
Full Rate = 7"/17.5 mbar

The gas pressure of the stove must be measured at the burner test nipple.

Gross Input

Max. Input Natural Gas G20 = 4.9kW/16,712 Btu's/h
Max. Input Natural Gas G25= 4.5kW/15,358 Btu's/h

Efficiency: = Class 2

Gas Flow Rates at 15°C, 1,013mbar in relation to gross calorific value of gas.

Natural Gas gross calorific value = 37.78 MJ/m^3
Maximum flow rate = 0.490 m^3/hr

Burner: CPD Gas Burner

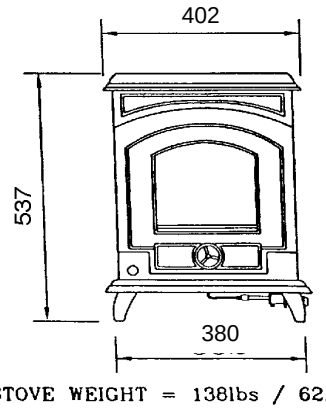
Burner Injectors:
CAT 18 Bray 320 - N.G.

Pilot Injectors

Size 3.5 - N.G.

Ignition: Remote Control Ignition.

Fig.1



STOVE WEIGHT = 138lbs / 62.6 kilos approx.

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 Balanced Flue Gas Stove. This room heater and special flue 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 are kept clean.

The Shire Balanced flue system is a combustion system where the inlet air and exhaust gases enter and exit through two separate concentric passageways within the same vent system.

The Balanced Flue system allows this gas appliance to be vented directly to the outside atmosphere.

NOTE: Before installation, check that the local distribution conditions, nature of gas and pressure, and adjustment of the appliance are compatible.

When installing, operating and maintaining your Stanley Shire Balanced Flue 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.

It is important to note that once a type of gas has been specified the stove cannot run off any other type of gas. (i.e. Natural Gas only)

The burner units are not interchangeable between Gas types.

Republic of Ireland Installation
Install in accordance with the:
* **Building Regulations Part J.**
* **I.S. 813 - Domestic gas installations.**
* **I.S. 265 - Part 1 & 2 - Installation of gas service pipes.**

U.K. Installation
Install in accordance with the:

* **The Gas Safety (Installation and Use) Regulations 1994 (as amended).**

* **BS 5440: Parts 1 & 2, Installation of flues and ventilation for gas appliances of rated input not exceeding 60kw (1st, 2nd & 3rd family gases)**
* **B.S. 5871: Parts 1, 2 & 3, Specification for installation of gas fires, convector heaters, fire/back boiler and decorative fuel effect gas appliances.**
* **Building Regulations for Britain, Scotland, Wales and Northern Ireland.**

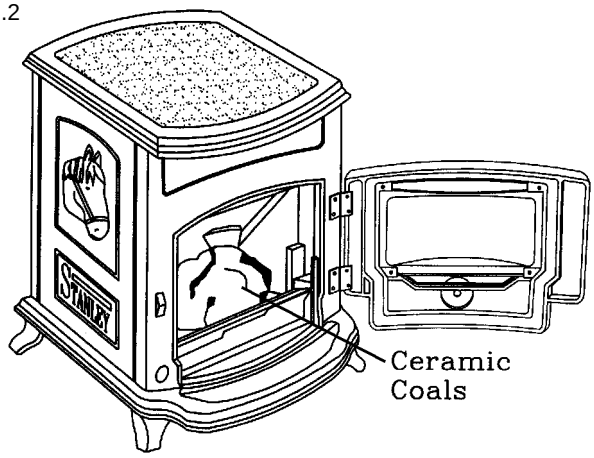
This appliance has been tested and approved in accordance with the essential requirements of Annex 1 in the Gas Appliance Directive (90/396/EEC) as amended.

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, the wall mounted control unit and transformer etc,.

Fig.2



2. Position stove in it's chosen location and connect to the Balanced Flue System.

LOCATION

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

There are many conditions to be taken into account when selecting a location for your Shire Balanced Flue Gas Stove.

1. The clearance requirements of the stove from combustible and non combustible materials.
2. The positioning of the vent terminal on an adjacent exterior wall within the restrictions outlined in table 1.
3. The flue requirements must also be taken into account.

It is not designed to be fixed permanently to the floor or wall.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (see figs 3- 6 Inclusive)

Back wall	6" (150mm)
Left side wall looking from front	5" (125mm)
Right side wall looking from front	5" (125mm)
Alcove or mantle from top of unit	12" (300mm)

Fig.3

When installing the stove against a combustible wall leave a 6" space between the back of the stove and the wall for air circulation (see fig. 5)

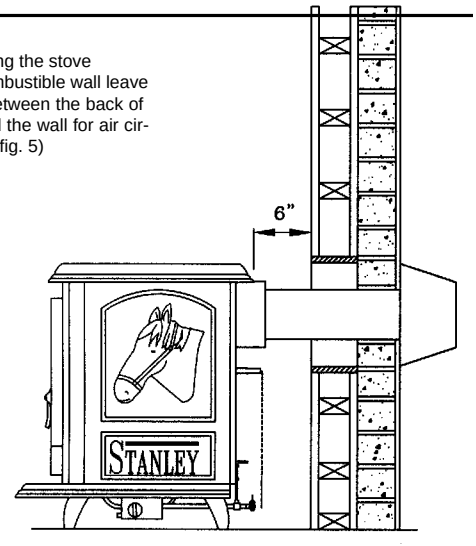


Fig.4

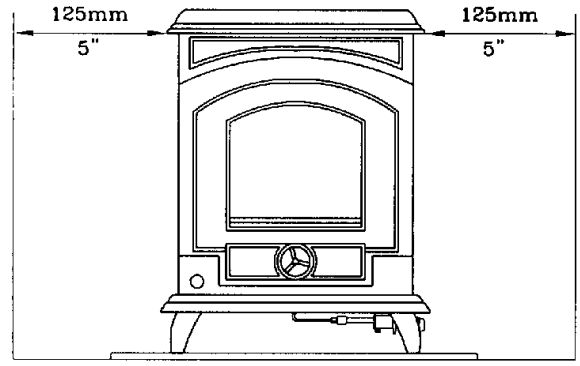


Fig.5

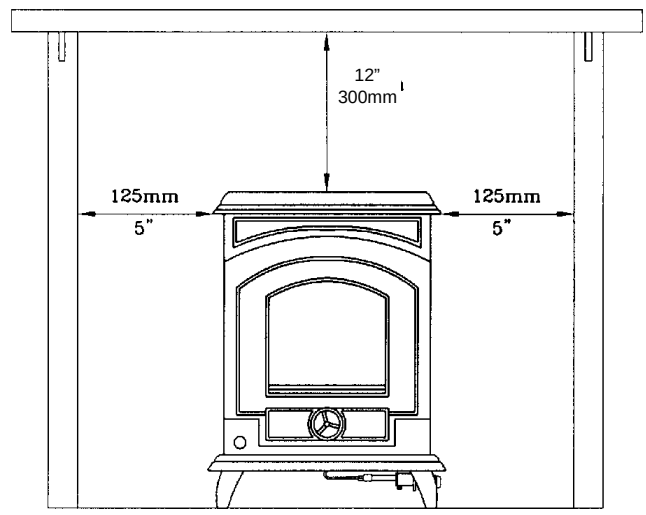
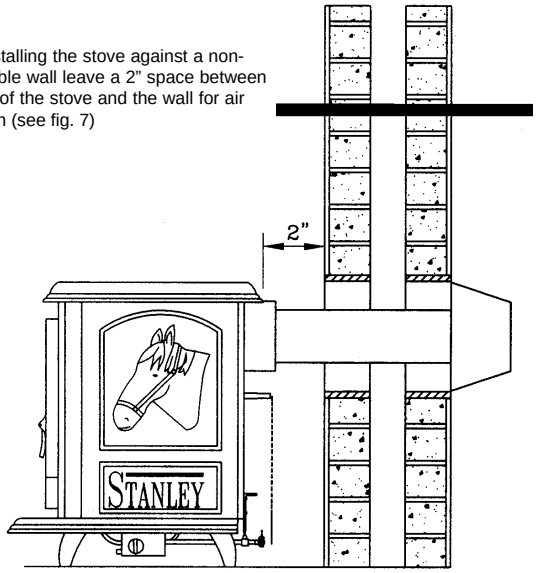


Fig.6

When installing the stove against a non-combustible wall leave a 2" space between the back of the stove and the wall for air circulation (see fig. 7)

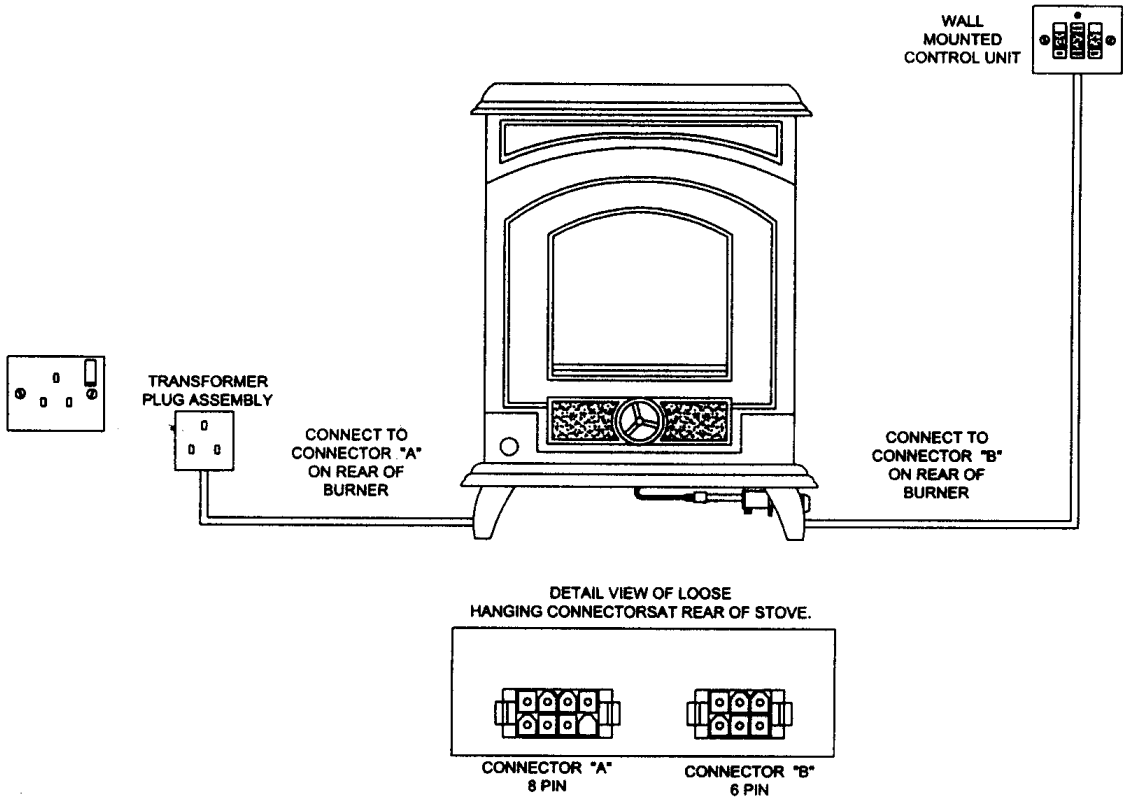


CONNECTION OF WALL MOUNTED CONTROL UNIT & ELECTRICAL SUPPLY

The transformer plug assembly must be connected to a suitable electrical supply and the other end of the lead is connected to the 6 pin connector. The wall mounted control unit is to be located in a suitable position for easy use of the remote control. The lead to the wall mounted control unit is connect to the 8 connector. (See Fig.9)

Secure the above leads so that they cannot come in contact with any part of the stove body which may become hot.

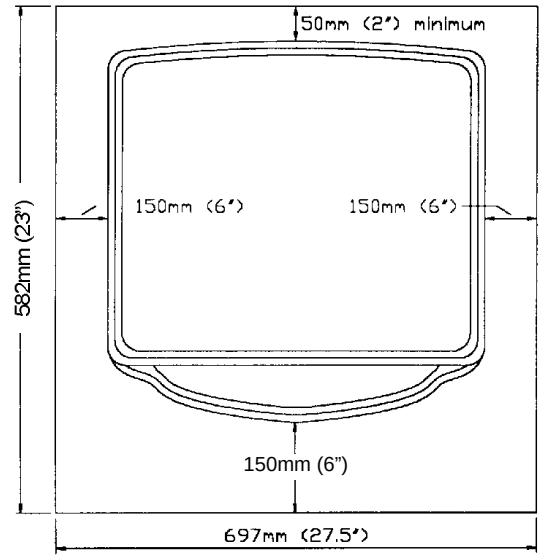
Fig.7



HEARTH FITTING

This stove MUST be installed on a concrete constructional hearth, or on a fire proof/non-combustible hearth slab, minimum size 27.5" (697mm) x 23" (582mm) deep with the fire place opening centrally located. The hearth material should be at least 12mm (1/2") thick, the top surface being preferably 50mm (2") above floor level to discourage the placing of carpets over it. (see fig. 8)

Fig.8



FLUE CONNECTION

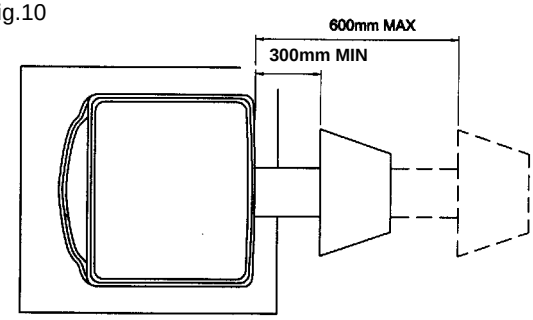
The Shire Balanced Flue Stove is approved to be vented to the outdoors through an adjacent exterior wall. The vent terminal is connected to the stove by means of a horizontal flue pipe with concentric passageways. **It is not permissible to put a vertical length of flue on to this stove.** The vent terminal must be fitted to an exterior wall and located in accordance with the requirements outlined in Table 1 (Page No. 6).

The flue pipe joining the stove to the vent terminal must have two concentric passageways. The inner passageway carries the products of combustion, while the outer passageway carries the air supply for combustion. It is essential that both passageways are sealed from each other and in turn sealed from the room in which this appliance is installed. It is not possible to use fire cement on the flue joints as it may restrict the airflow within the passageways. Use the aluminium sealing tape provided with the flue system. The flue pipe has an external diameter of 150mm (6").

When connecting the flue pipe to the stove always keep the crimped end facing outwards.

The telescopic section of the flue can vary in length from 400mm (16") to 600mm (24"). When installing the stove do not use a flue length greater than 600mm (24") . The maximum allowable distance between the stove and its flue terminal is 600mm (24") as outlined in Fig. No. 10.

Fig.10



SEALING THE FLUE JOINTS

The flue joints must be weather sealed to prevent moisture entering the flue system. It is recommended that the flue joints are sealed with a high temperature tape, such as aluminium tape.

VENT TERMINAL

The vent terminal must be located in accordance with BS 5440: Part 1:1990 for natural draught Balanced Flue. This standard is summarised in Fig. 9 & Table 1.

Fig.9

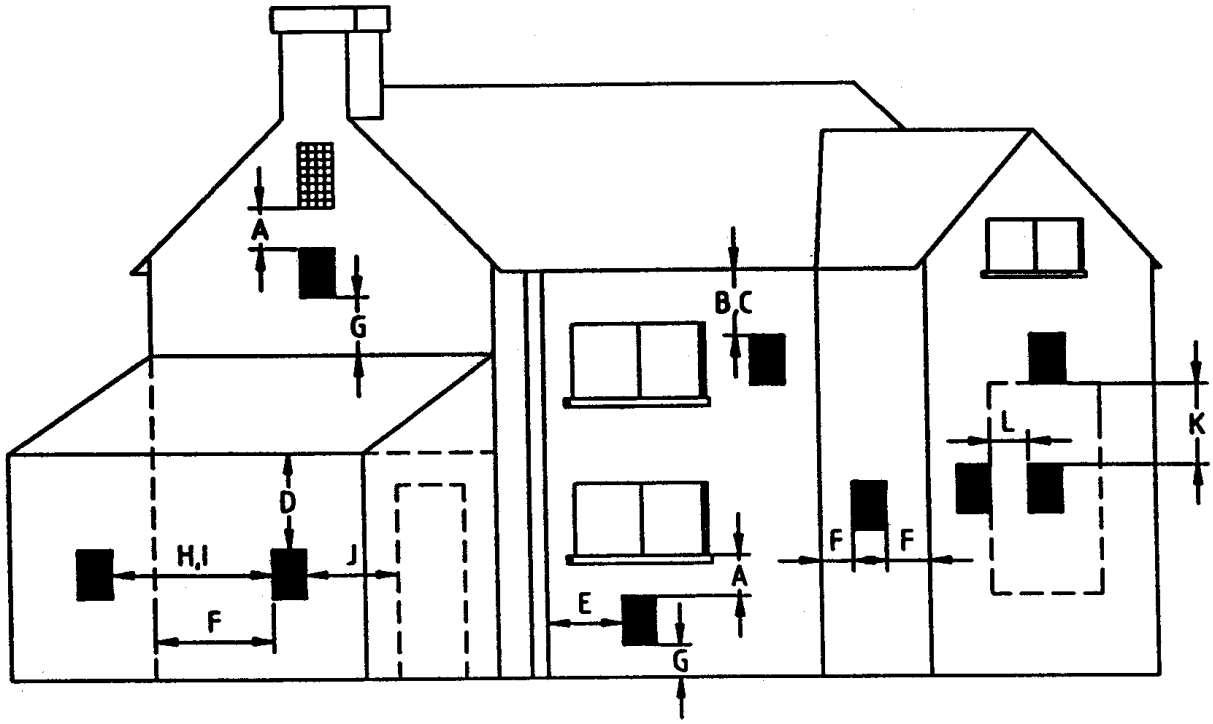


TABLE 1

DIMENSION	TERMINAL POSITION	MINIMUM DISTANCE (MM)
A	Directly below an opening window or other opening e.g. air brick	300
B	Below gutters, soil pipes or drain pipes	300
C	Below eaves	300
D	Below balconies or car port roofs	600
E	From vertical drain pipes and soil pipes	75
F	From internal or external corners	600
G	Above ground, roof or balcony level	300
H	From a surface facing a terminal	600
I	From a terminal discharging towards another terminal	600
J	From an opening in a car port (e.g. door, window) into a dwelling	1200
K	Vertically from a terminal on the same wall	1500
L	Horizontally from a terminal on the same wall	300

TIMBER FRAMED DWELLINGS

When installing the flue in properties of timber framed construction, the regulations (BS 5440:Part 1:1990) must be adhered to.

POST INSTALLATION CHECKS

Before leaving the appliance connected to the gas supply, the installer is required to visually examine the appliance and flue to ensure that:

(a) The seal between the combustion chamber and the room is intact and in good condition.
(b) The flue has been correctly sealed using the sealing tape as recommended.
(c) There are no debris contained within the flue assembly.
(d) The joint between the terminal and the wall is weather proof.

GAS PIPES & FITTINGS

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

* I.S. 238, I.S. 239, & prEN 1057 - Copper tubes.
* I.S. 265 - Installation of gas service pipes.
* I.S. 266 - Polyethylene pipes.
* EN 29453 & I.S.O. 9455 - Soft Solders.
* B.S. 669 - flexible hoses, fittings & sockets.
* B.S. 759 - valves, gauges and other safety equipment.
* B.S. 1387 - steel tubes.
* B.S. 6362 - stainless steel tubes.
* B.S. 1740 - Wrought steel pipes.

METERS

A suitable gas meter must be connected to the service pipe either by a representative of the gas board or by an appointed contractor. If using an existing meter have it checked to ensure that the meter is capable of dealing with the total rate of gas needed.

GAS PIPE SIZE

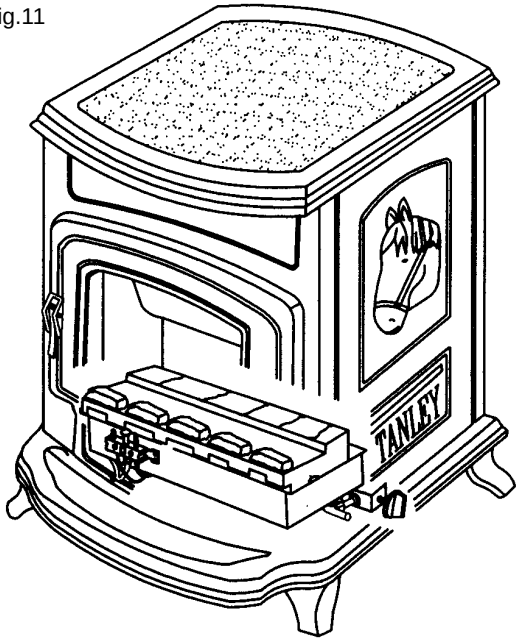
It is important that the correct service pipe size be used for adequate gas supply. This depends on the distance between the supply meter and the appliance relative to the input requirements. The gas supply to the appliance should be terminated near the appliance with an approved safety type service tap.

CONNECTION TO GAS SUPPLY

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 when operating on max. rate.

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.11



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

Fig.12

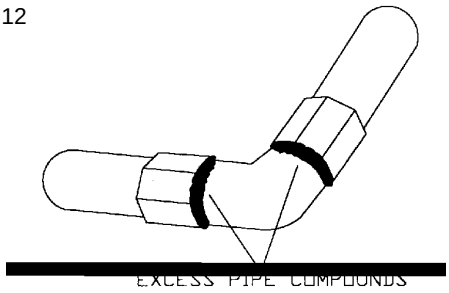
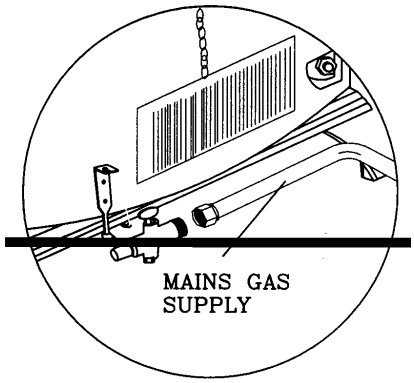


Fig.13



NOTE: Clean off any excess pipe compounds from connections.

WARNING: Only connect to gas type indicated on the rating plate.

GAS SOUNDNESS TESTING

Gas soundness testing should be in accordance with I.S. 813 (I.E.) and B.S. 6891 (U.K.). Correct gas pressure and proper gas supply 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.

CAUTION:

The appliance must be isolated from gas supply system during any gas soundness testing at pressures in excess of 50 mbar.

After testing gas supply pipe work, open isolation valve to stove and carry out gas soundness testing at normal working pressure 20 mbar for natural gas.

With stove lighting carry out a leak test downstream of control using gas leak detection fluid.

CAUTION: If using a gas leak detection fluid for leak testing DO NOT spray solution onto control body.

PLACEMENT OF COALS

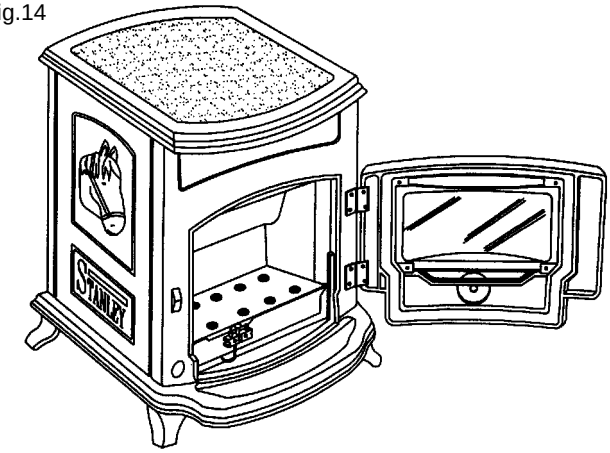
WARNING: The ceramic coals supplied with this stove are extremely durable and long lasting when fitted properly. They are, however, very delicate and can be easily damaged if they are not handled very carefully.

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 instructions as incorrect placement will effect the performance of the stove. Dust off the inside of the door glass using a clean dry cloth. (see fig. 17)

Note: Exhibit care when cleaning the burner to avoid blockage or damage of burner parts.

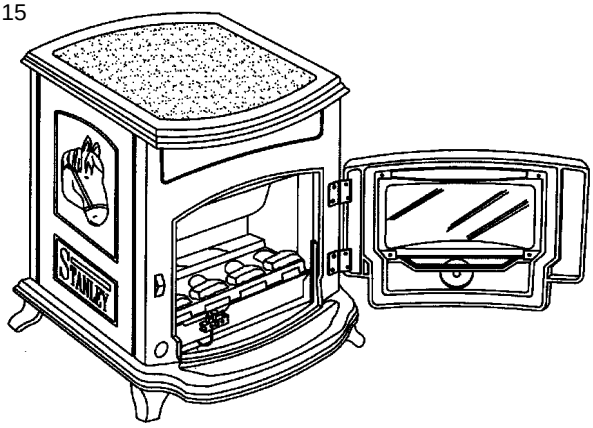
Fig.14



2. Lay the gasket material provided, on the burner with the holes in the burner lined up the holes in the gasket.

3. Lay the ceramic matrix on the burner with its front edge touching the rim on the front of the burner. Ensure that the holes in the burner are lined up as best as possible with the hob in the ceramic matrix. (See Fig.15)

Fig.15



`4. Place 4 medium coals on each spar of the matrix with their corners touching. (see fig. 16 & 17)

Fig.16

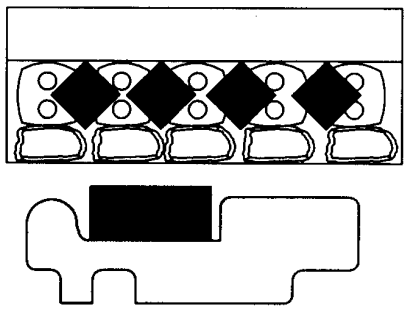
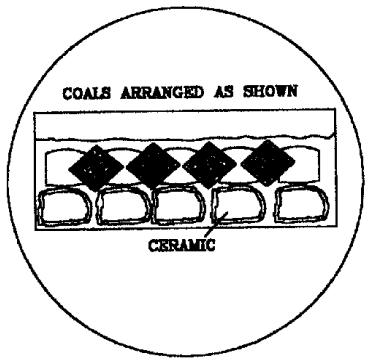
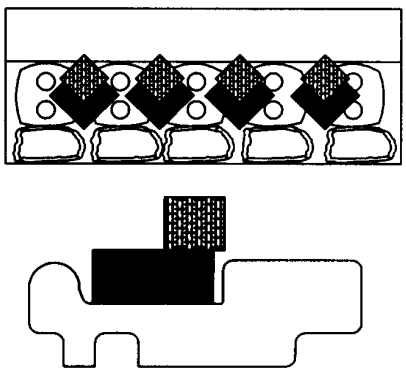


Fig.17



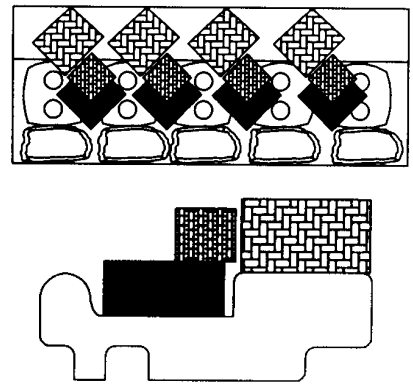
5. Place one small coal on each of the 4 medium coals (see fig.18).

Fig.18



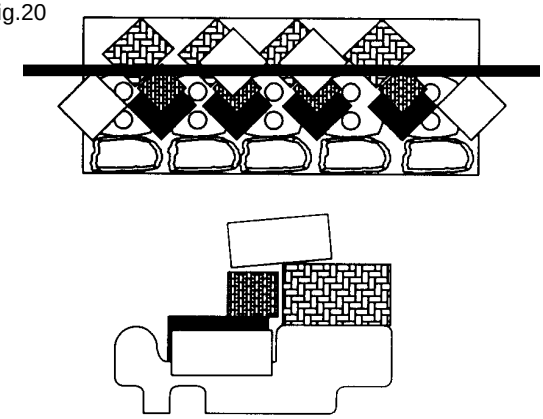
6. Place 4 large coals on the rear of the matrix with their corners touching. (see fig. 19)

Fig.19



7. Place 2 medium coals each two thirds on top of the large coals and on third of the small coals, with their edges touching. Also place one medium coal each side of the matrix. (see fig.20)

Fig.20



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

BEFORE LIGHTING

Purge air from the supply line as follows:

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

b When gas comes tighten inlet screw immediately.

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

STOVE OPERATION

WARNING: Do not operate the stove with the appliance door open, or if the glass panel in the front door has been broken or removed. Ensure the door latch is fully locked. Keep the door spin valve closed at all times when the stove is in operation.

During the first light up period an odour will rise from the stove, this is due to the materials in the stove

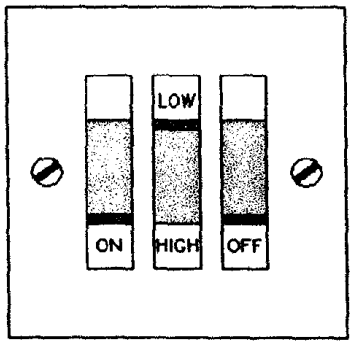
drying and curing. It is advisable to open a window or door to give extra ventilation to the room until the odour has gone.

REMOTE CONTROL STOVE

This stove can either be operated using the wall mounted control unit or the remote control handset.

If the pilot light is extinguished either intentionally or unintentionally no attempt should be made to light the gas until at least 4 minutes have elapsed.

Fig.21



WALL MOUNTED CONTROL UNIT

Igniting the pilot light

Reset the control unit by depressing the 'off' switch.
Depress and release the on switch. The pilot light should then automatically ignite and any further operation of the stove will be delayed for approximately 20 seconds whilst the safety thermocouple attains its working temperature.

Running the stove at high output

Position the HI/LOW switch such that it is in the HIGH position. This means that the stove will operate on its maximum output.

Running the stove at a low output

Position the HI/LOW switch such that it is in the LOW position. This means that the stove will operate on its minimum output.

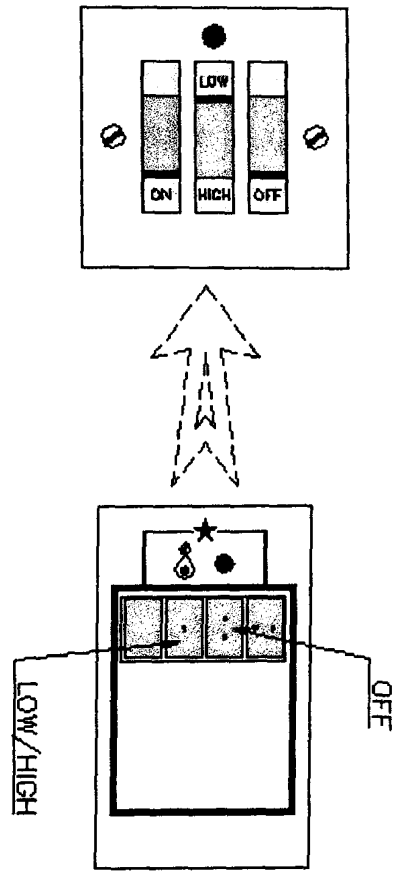
Extinguishing the stove

The stove can be extinguished at any time by pressing the OFF switch on the wall unit. This will extinguish the stove completely.

Remote Control Handset.

For all operations using the handset it should be directed at the wall mounted switching unit.

Fig.22



Igniting the pilot light

Reset the control unit by depressing the OFF button on the handset.
Depress the two buttons identified with a star (the spark) simultaneously. The pilot light will then light automatically and any further operation of the stove will be delayed for approximately 20 seconds whilst the safety thermocouple attains its working temperature.

Running the stove at high output

Depress the button on the handset identified by a flame symbol. This is the button which switches the output of the stove from HIGH to LOW and back.

Running the stove at a low output

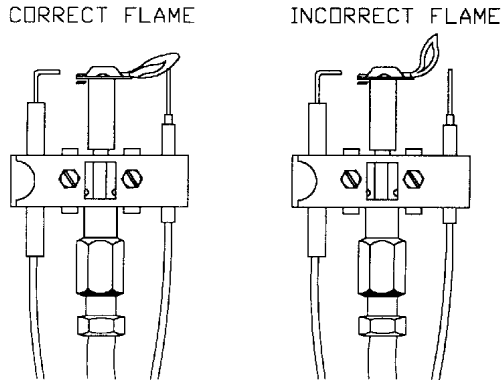
In order for the stove to be run at a low output the wall mounted control unit must be set so that the switch is in the LOW position as otherwise it overrides the functions of the remote control handset.

Depress the button on the handset identified by a flame symbol until the desired output is achieved.

PILOT FLAME

NOTE: The pilot flame should be a steady blue flame which has contact with the upper 3/8" of the thermopile. (see fig. 23)

Fig.23



IMPORTANT: Please ensure that the pilot injector is clear at all times, as a partially blocked injector will result in a reduced flame which may be sufficient for ignition purposes.

MAINTENANCE/SERVICING

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

Isolate the main gas supply before carrying out any maintenance.

GENERAL

Ensure that the stove is turned off and cooled before any cleaning, servicing or maintenance is carried out. After continued use there may be a build up of soot on the coals which will require removal. Any form of deposits will reduce the performance of the appliance and should be removed using a soft brush.

Care should be taken to ensure deposits do not enter into the vent terminal. If this does occur then cleaning should be undertaken promptly and the cause investigated before further use.

The coal arrangement effects the performance of this appliance. The suggested arrangement is a recommendation which ensures good performance. Should any coals become broken during the cleaning process it is essential that replacements are purchased, as there is an optimum number of coals for a satisfactory functioning stove and its flame picture.

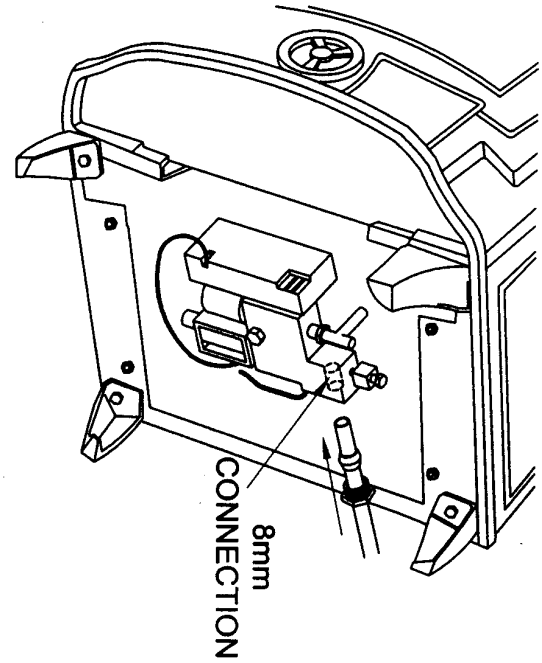
To clean this appliance open the door by unscrewing the door handle. It is essential that the door is re-sealed correctly before use. If the rope gasket surrounding the door is damaged in any way it will require replacement with a comparable type.

NOTE: The door must be shut correctly before use of this appliance and its flue system must be serviced at least annually by a suitable qualified and competent person.

REMOVAL OF BURNER

1. Shut off gas supply at the shut off valve.
2. Open door.
3. Carefully remove the coals.
4. Disconnect the 8mm gas pipe at the back of the control under the lip. (see fig. 24).

Fig.24



5. Unscrew the four bolts located on the under side of the stove. (see fig.26)
6. Carefully lift up the burner assembly 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. (see fig. 27, 28 & 29).

Fig.25

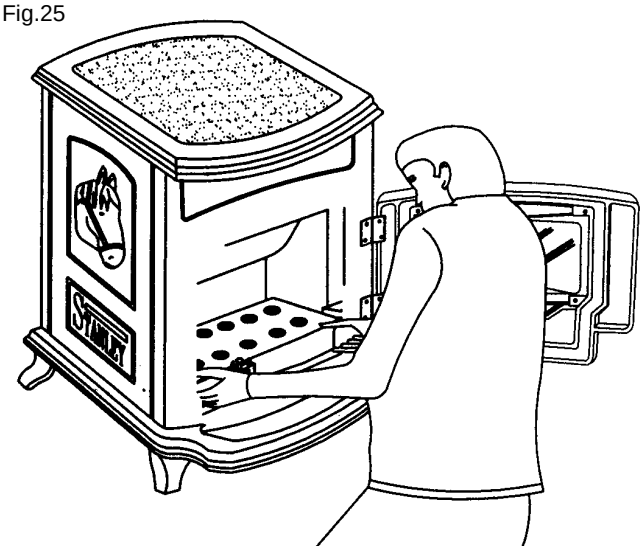


Fig.26

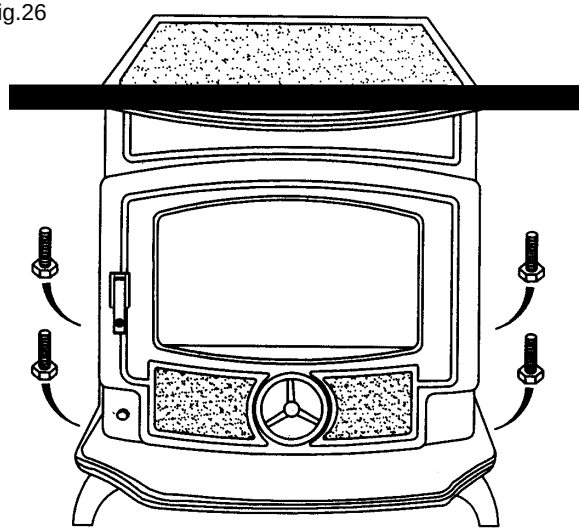


Fig.27

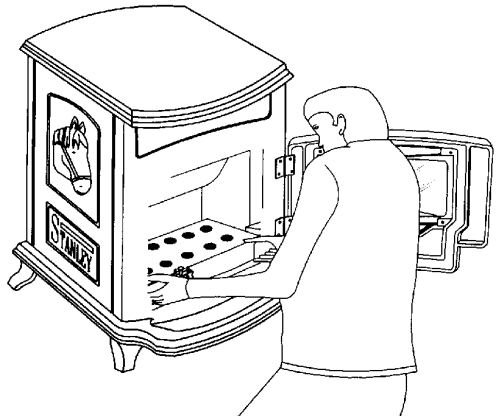


Fig.28

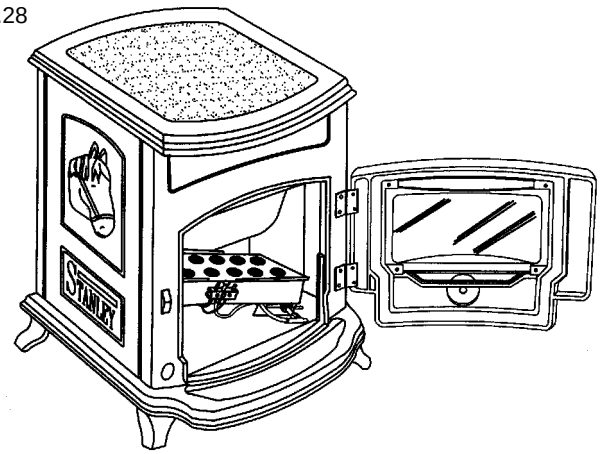


Fig.29

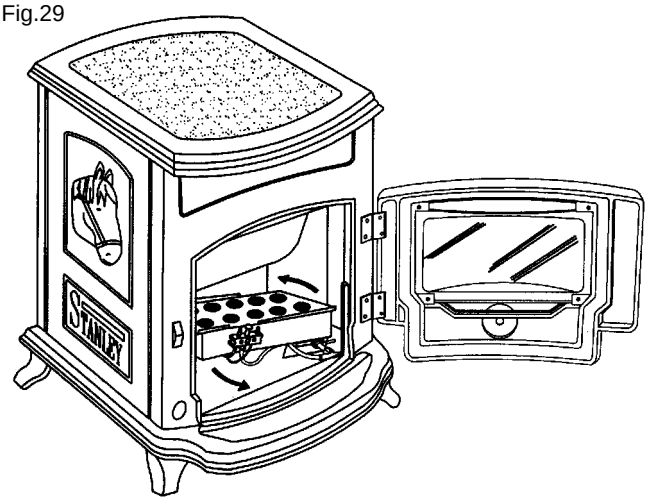


Fig.30

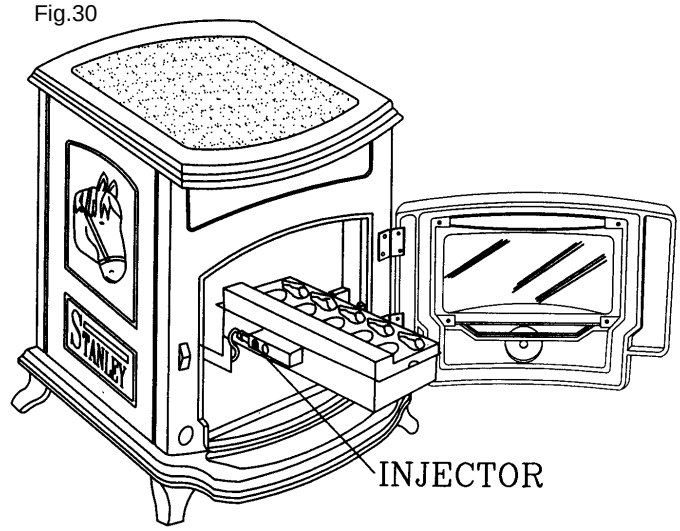
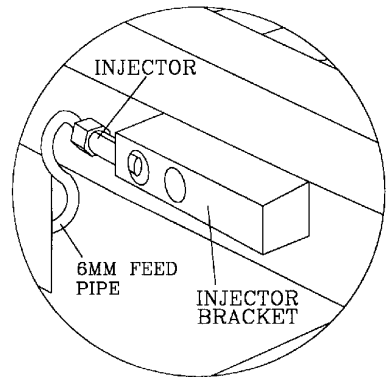


Fig.31



Changing of Burner Injector Orifice

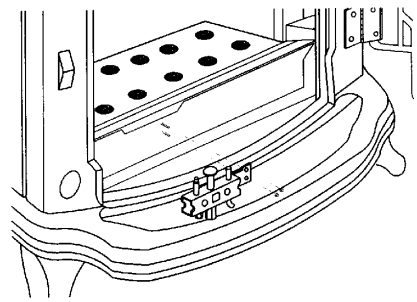
With the complete burner assembly removed as per fig. 28, 29, 30.

1. Disconnect the 8mm gas feed pipe from the control to injector. (see fig. 31)
2. Slacken the 8mm gas feed pipe to the injector at the control.
3. Remove Injector from burner.

Removal of Pilot Injector

1. Unscrew the two 1/4" slotted head screws from pilot burner. (see fig. 32)
2. Disconnect the 4mm gas feed pipe.

Fig.32



ENAMEL CLEANING

General cleaning must be carried out when the stove is cool.

If this stove is finished in a high gloss vitreous enamel, to keep the enamel in the best condition observe the following tips:

1. Wipe over daily with a soapy damp cloth, followed by a polish with a clean dry duster.
2. For stubborn deposits a soap impregnated pad can be carefully used on the vitreous enamel.
3. Use only products recommended by the Vitreous Enamel Association, these products carry the vitramel label.

4. **DO NOT USE ABRASIVE PADS OR OVEN CLEANSERS CONTAINING CITRIC ACID ON ENAMELLED SURFACES. ENSURE THAT THE CLEANSER MANUFACTURERS INSTRUCTIONS ARE ADHERED TO.**

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
	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
Pilot lights but goes out when the control knob is released	Insufficient flame impingement on thermocouple	Call your qualified service technician
	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	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
Noise in pilot/burners	Excessive gas pressure	Call your qualified service technician
Flame characteristics:		
Hard sharp flame		
Yellow flame	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

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STANLEY