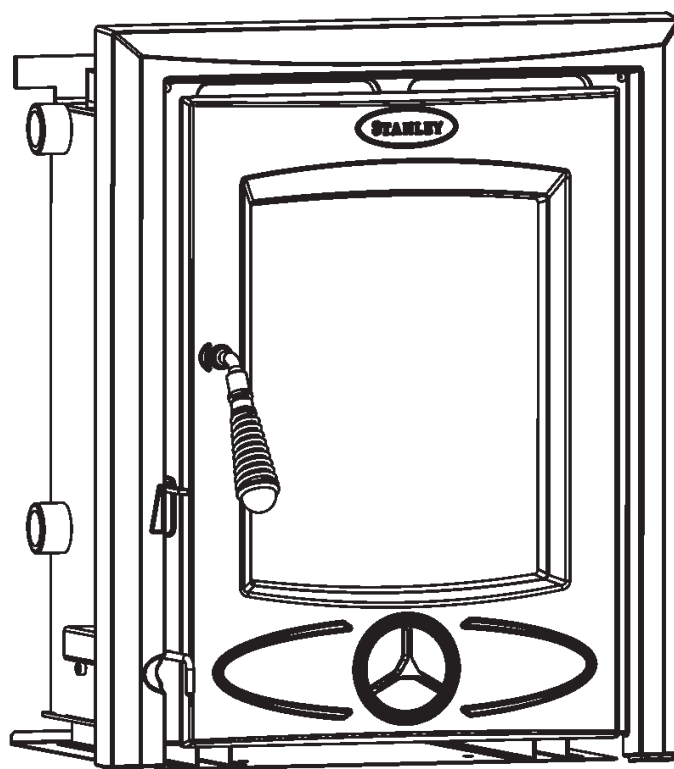




Cara Boiler Insert Stove



This appliance is hot while in operation and retains its heat for a long period of time after use. Children, aged or infirm persons should be supervised at all times and should not be allowed to touch the hot working surfaces while in use or until the appliance has thoroughly cooled.

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002.

INSTALLATION AND OPERATING INSTRUCTIONS

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INSERT STOVE INSTALLATION & OPERATING INSTRUCTIONS

NOTE: Please note that it is a legal requirement under England & Wales Building Regulations that the installation of the stove is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

GENERAL

When installing, operating and maintaining your stove respect basic standards of fire safety. Read these instructions carefully before commencing the installation. Failure to do so may result in damage to persons or property. Consult your local Municipal office and your insurance representative to determine what regulations are in force. Save these instructions for future reference.

Special care must be taken when installing the stove such that the requirements of the Health & Safety at Work Act are met.

Handling

Adequate facilities must be available for loading, unloading and site handling.

Fire Cement

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact with the skin wash immediately with plenty of water.

Asbestos

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek guidance and use appropriate protective equipment.

Metal Parts

When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

IMPORTANT WARNING: This stove must not be installed into a chimney that serves any other heating appliance. There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit fumes into the room.

The installation must be completed in accordance with current National and European Standards and Local Codes. It should be noted that the requirements and these publications may be superseded during the life of this manual.

Please refer to the current standards, BS EN 15287-1:2007 Design, Installation and Commissioning of chimneys. BS EN 14336:2004: Heating Systems in Buildings. Installation & Commissioning of Water Based Heating Systems. BS EN 12828: 2003; Heating Systems in Buildings. Design of Water Based Heating Systems. BS EN 12831: 2003; Heating Systems in Buildings. method for calculation of the design heat load.

ELECTRICAL CONNECTIONS

The installation of any electrical services during the installation of this stove must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671.

PRE-INSTALLATION

After removing the stove from the packaging, open the fire door and remove the loose packing. Prior to installation all the internal components of the stove are removed to gain access to fixings and to make it lighter for installation.

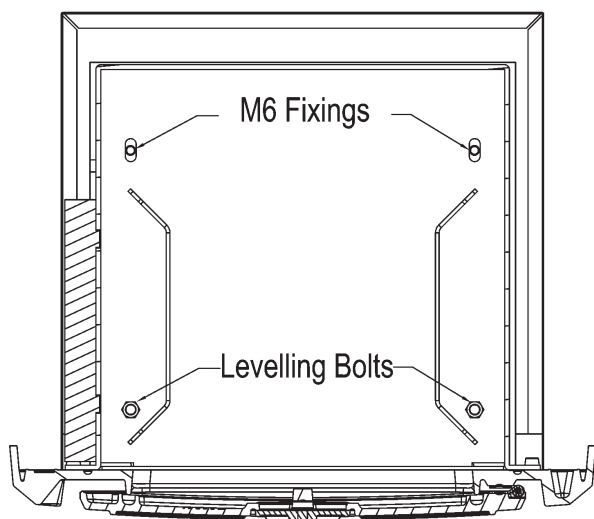
To remove the bottom baffle, lift the front edge until it hits the top and then slide it forward. Then drop the rear edge clear of the supporting rib.

To remove the top baffle, lift the back edge, slide the baffle as far forward as possible, the front edge should then drop down allowing the baffle to be removed.

Remove the flue spigot and gasket by removing the four bolts.

Next, remove the grate by pushing it from underneath, the riddling bar is not fixed to the grate. This will allow access to two M6 fixings (See Fig.1) which will attach the stove to the outer casing. Remove the 2 fixings at the back, allowing the insert stove to be removed from the external casing. See Fig.2 A,B,C.

Fig.1



CHIMNEY

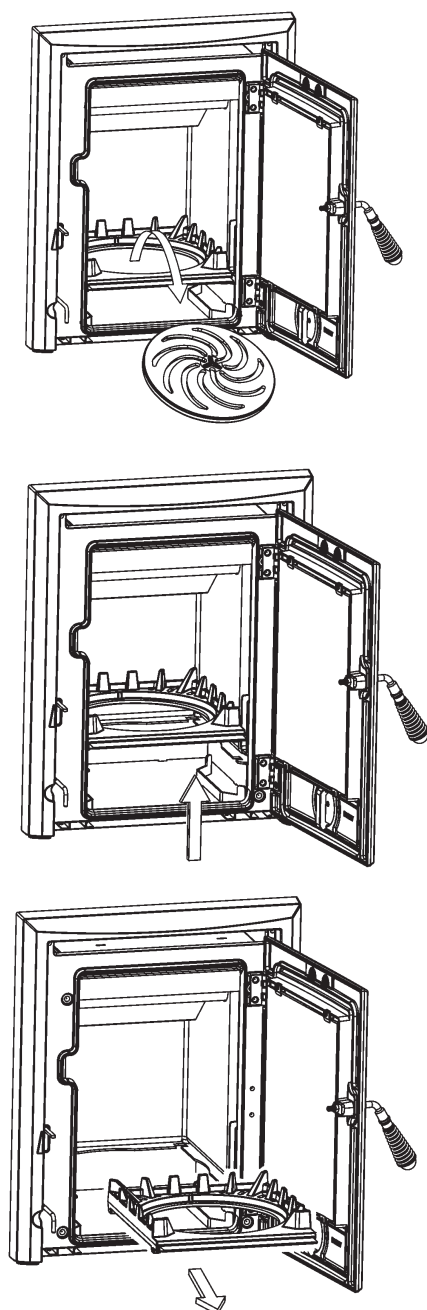
THIS PRODUCT IS SUITABLE FOR CHIMNEY INSTALLATION ONLY.

The stove is a radiant room heater and must be connected to a chimney of the proper size and type. For ROI the chimney must have a diameter of at least 125mm. It is recommended that a flue liner of diameter 125mm be used to line the chimney, the liner should be approved for use with solid fuel. See Fig.1.

For the UK the chimney must have a diameter of at least 150mm, an adaptor is available where required to fit between the flue outlet and a 6" flexible flue liner.

Never connect to a smaller size chimney. Do not connect to a chimney serving another appliance.

Fig.2



A

In order for the stove to perform satisfactorily the chimney height must be sufficient to ensure an adequate draught of approximately 12 Pa so as to clear the products of combustion and prevent smoke problems into the room.

B

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in EN 13384-1 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

C

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

It is permitted to connect using a closure plate and a connection piece from the stove to the closure plate (See Fig. 4), provided that the chimney is of sound construction with no leaks or cracks, a clay flue liner has been used that can withstand up to 1000°C, the clay liner has a diameter no greater than 200mm.

If installation is into an existing chimney then it must be sound and have no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large i.e. more than 230 mm x 230 mm. Remedial action should be taken, if required, seeking expert advice, if necessary. If it is found necessary to line the chimney then a flue liner suitable for solid fuel must be used in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the stove. If the stove is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.

If there is no existing chimney then any new system must be to the designation described above and in accordance with Building Regulations Approved Document J.

A single wall metal fluepipe is suitable for connecting the stove to the chimney but is not suitable for use as the complete chimney. The chimney and connecting flue must have a minimum diameter of 150mm and at no point must the diameter reduce to less than the size of the outlet socket of the stove.

Any bend in the chimney or connecting fluepipe should not exceed 45° . 90° bends should not be used.

Combustible material should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the stove in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If it is found that there is excessive draught in the chimney then a draught stabiliser should be fitted. Fitting of a draught stabiliser will affect the requirement for the permanent air supply into the room in which the stove is fitted in accordance with Approved Document J (see also combustion air supply).

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe.

ALL FLUE INSTALLATIONS ARE THE RESPONSIBILITY OF THE CUSTOMER.

Fig.3

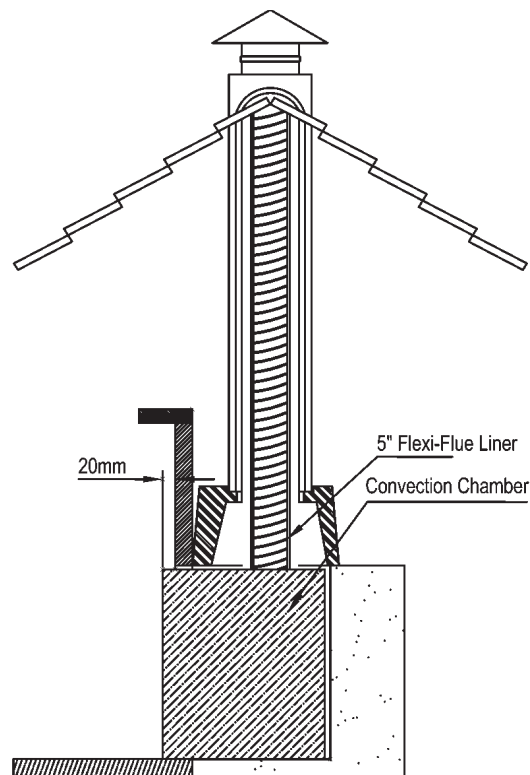
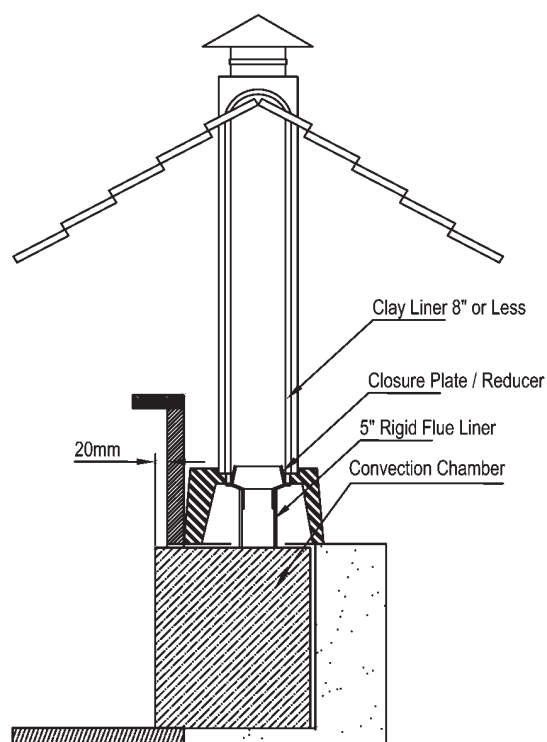


Fig.4

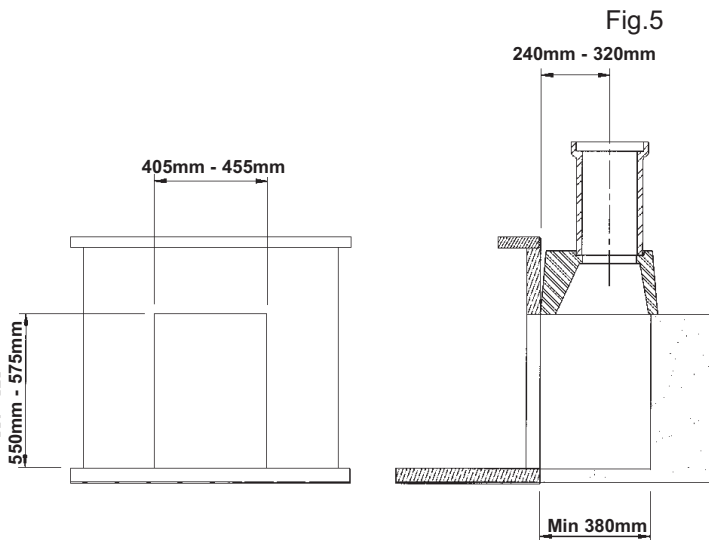


FITTING INSTRUCTIONS

Fully Lined Chimney

Step 1

Prepare the fireplace area. Ensure the opening is suitable for fitting of the insert stove opening required, i.e. remove fire surround trim if fitted. See Fig.5.



Step 2

Ensure the floor area is level with the hearth, this area needs to be level as the insert fire is screw fixed to the floor.

Step 3

Decide which boiler tappings are to be used to connect the boiler and blank off the other two connections.

Step 4

Lay the base plate into the opening and position it so that the front edge is level with the front edge of the opening.

Step 5

Mark the drill locations and drill the holes using a 5.5mm drill bit. Fix the base plate to the floor using the self tapping screws provided.

Step 6

Lift the stove onto the base plate. Remove all internal parts as per pre-assembly instructions prior to lifting it. The stove can be lifted onto the base plate approximately 75mm first and then it can be pushed into the final position while taking care to lift the front edge to preserve the hearth.

Step 7

Drop the flexi flue liner down through the chimney and into the stove.

Step 8

Lay the sealing gasket on to the flue spigot, then fit the flue spigot to the end of the flexi flue liner using the grub screws provided.

Step 9

Then using the M6 x 10mm screws secure the stove to the convection chamber. Push the insert stove against the fireplace before fully tightening these bolts.

Step 10

Pull the flexi liner back up through the flue outlet and fix the flue spigot into position using the M8 nuts provided. It may be necessary to cut a prop to hold the spigot in place while the fixings are being attached.

Step 11

Complete the installation of the flexi liner at the top of the chimney in accordance with the manufacturers instructions.

Step 12

Plumb the boiler - see Plumbing Section.

NOT FULLY LINED CHIMNEY (Using Closure Plate & Pipe Extension)

Step 1

Prepare the fireplace area. Ensure the opening is suitable for fitting of the insert stove opening required, i.e. remove fire surround trim if fitted. See Fig.5.

Step 2

Ensure the floor area is level with the hearth, this area needs to be level as the insert fire is screw fixed to the floor.

Step 3

Decide which boiler tappings are to be used to connect the boiler and blank off the other two connections.

Step 4

Measure the distance to the flue outlet of the stove and compare to the chimney, decide on best orientation of the offset adaptor.

Step 5

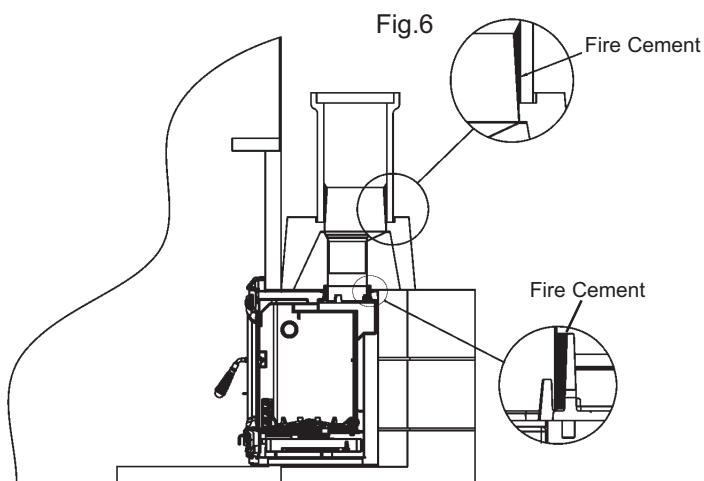
Push the offset adaptor into position and make a seal using approved fire cement between the adaptor and the clay liner. The seal should be tapered to allow any condensation that may occur in the chimney flow back into the flue. See Fig.6.

Step 6

Lay the base plate into the opening and position it so that the front edge is level with the front edge of the opening.

Step 7

Mark the drill locations and drill the holes using a 5.5mm drill bit. Fix the base plate to the floor using the self tapping screws provided.



Step 8

Lift the stove onto the base plate. Remove all internal parts as per pre-assembly instructions prior to lifting it. The stove can be lifted onto the base plate approximately 75mm first and then it can be pushed into the final position while taking care to lift the front edge to preserve the hearth.

Step 9

Measure and cut the extension pipe at the straight end to the required dimension using the guide collar provided.

Step 10

Lay the flue gasket onto the the flue spigot and then fit the extension pipe to the spigot using the grub screws provided and seal using fire cement.

Step 11

Fit the spigot and extension pipe so that it completes the flue installation between the stove adaptor (closure plate).

Step 12

Bolt the spigot to the stove and re-apply fire cement to the seals where it may have been disturbed during the installation.

Step 13

Then using the M6 x 10mm screws secure the stove to the convection chamber. Push the insert stove against the fireplace before fully tightening these bolts.

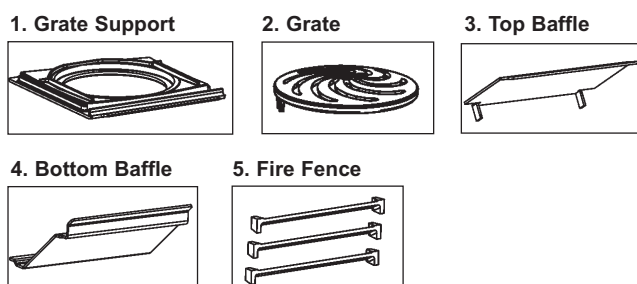
Step 14

Plumb the boiler - See Plumbing Section.

Fit the individual components in the following order:

1. Grate Support
2. Grate
3. Top Baffle
4. Bottom Baffle
5. Fire Fence

Fig 7



1. Grate Support

Tilt the grate support up on one side and pass it carefully through the door opening, fit the 4 short legs on the underside into the openings in the steel-work.

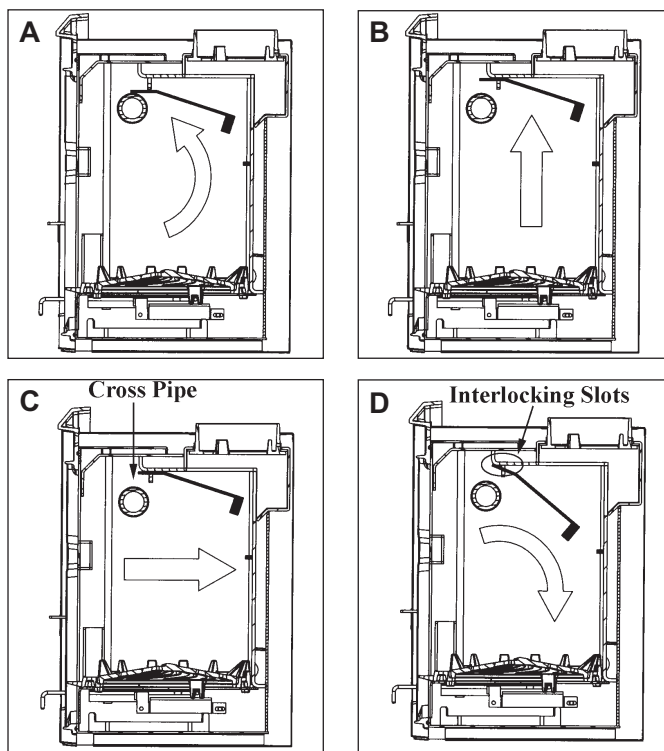
2. Grate

The grate simply lays into the grate support but care needs to be taken that the riddling bar will rest in the middle of the fork.

3. Top Baffle

The baffle fits to the roof of the stove using interlocking slots. The baffle should be lifted into position with the slots to the front and just over the cross pipe. Then lift the baffle so that the tabs on the boiler pass through the slots, slide the baffle back so that the slots interlock. The baffle should then fall down at the rear and be in contact with the boiler top in front. See Fig.8.

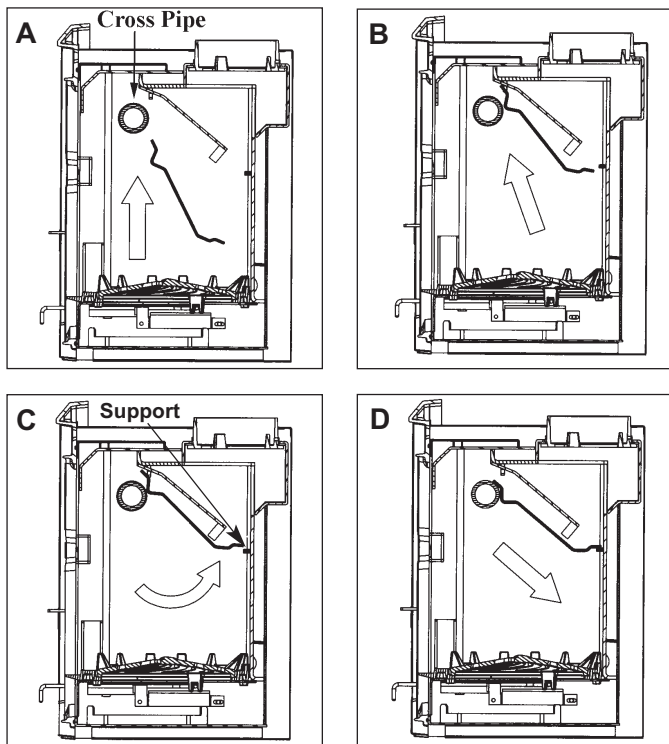
Fig.8



4. Bottom Baffle

Lay the baffle into the stove so the edge with corners removed is to the front. Lift the front edge of the baffle on top of the cross pipe, then lay the rear edge on the support on the back of the boiler. See Fig.9.

Fig.9



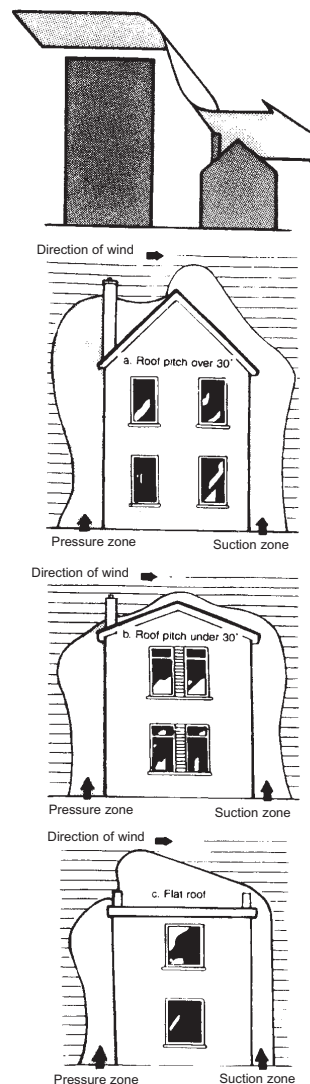
5. Fire Fence

Lay the fire fence into the slots provided ensuring that they slope from front to back so that no embers can fall out through the fire fence.

DOWN DRAUGHTS

However well designed constructed and positioned, the satisfactory performance of the flue can be adversely affected by down draught caused by near-by hills, adjacent tall buildings or trees. These can deflect wind to blow directly down the flue or create a zone of low pressure over the terminal. A suitable anti-down draught terminal or cowl will usually effectively combat direct down blow but no cowl is likely to prevent down draught due to a low pressure zone. (See Fig.10)

Fig 10



VENTILATION AND COMBUSTION AIR REQUIREMENTS

It is imperative that there is sufficient air supply to support correct combustion. The minimum effective air requirement for this appliance is 5.5cm^2 . When calculating combustion air requirements for this appliance use the following equation: 550mm^2 per each kW of rated output above 5 kW should be provided, where a flue draught stabiliser is used the total free area shall be increased by 300mm^2 for each kW of rated output. If there is another appliance using air fitted in the same or adjacent room, it will be necessary to provide an additional air supply.

All materials used in the manufacture of air vents should be such that the vent is dimensionally stable, corrosion resistant, and no provision for closure. The effective free area of any vent should be ascertained before installation. The effect of any grills should be allowed for when determining the effective free 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.

An air vent outside the building should not be located less than the dimensions specified within the Building Regulations and B.S. 8303: Part 1 from any part of any flue terminal. These air vents must also be satisfactorily fire proofed as per Building Regulations and B.S. 8303: Part 1.

Air vents in internal walls should not communicate with bedrooms, bedsits, toilets, bathrooms or rooms containing a shower.

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 the ingress of moisture. Existing air vents should be of the correct size and unobstructed for the appliance in use. If there is an extraction fan fitted in adjacent rooms where this appliance is fitted, additional air vents may be required to alleviate the possibility of spillage of products of combustion from the appliance/flue while the fan is in operation. Refer to B.S. 8303 Part 1.

Where such an installation exists, a test for spillage should be made with the fan or fans and other appliances using air in operation at full rate, (i.e. extraction fans, tumble dryers) with all external doors and windows closed.

If spillage occurs following the above operation, an additional air vent of sufficient size to prevent this occurrence should be installed.

Especially Airtight Properties:-

If the stove is being fitted in a property where the design air permeability is less than $5\text{m}^3 / (\text{h}.\text{m}^2)$ (normally newer properties built from 2006), then a permanent ventilation must be fitted to provide 550mm^2 of ventilation for each kW of rated output. If a draught stabiliser is also fitted then the requirement is 850mm^2 per kW of rated output.

PERMANENT AIR VENT

The stove requires an adequate air supply in order for it to operate safely and efficiently. The installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion and/or ventilation air. This air vent should not under any circumstances be shut off or sealed.

Extractor Fan

There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit smoke and fumes into the room.

COMMISSIONING & HANDOVER

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, when a small fire may be lit and checked to ensure the smoke and fumes are taken from the stove up the chimney and emitted safely to the atmosphere. **Do not run at full output for at least 24 hours.**

On completion of the installation and commissioning ensure that the operating instructions for the stove are left with the customer. Ensure to advise the customer on the correct use of the appliance with the fuels likely to be used on the stove and warn them to use only the recommended fuels for the stove.

Advise the user what to do should smoke or fumes be emitted from the stove. The customer should be warned to use a fire guard to BS 6539 in the presence of children, aged and/or infirm persons.

LOCATION

There are several conditions to be considered in selecting a location for your stove.

- A. This product is designed to be installed into a fireplace.
- B. Allowances for proper clearances to combustibles.
- C. Plumbing, gravity circulation to cylinder.

CLEARANCE TO COMBUSTIBLES

This appliance must be installed in a recess, the recess should not contain any combustible materials. Wooden battens and plaster board should not be used within the clearance to combustibles. The minimum clearance to combustibles required is 200mm to the top, 200mm to the sides, 550mm directly to the front and 350mm to any combustible flooring.

Fig.11

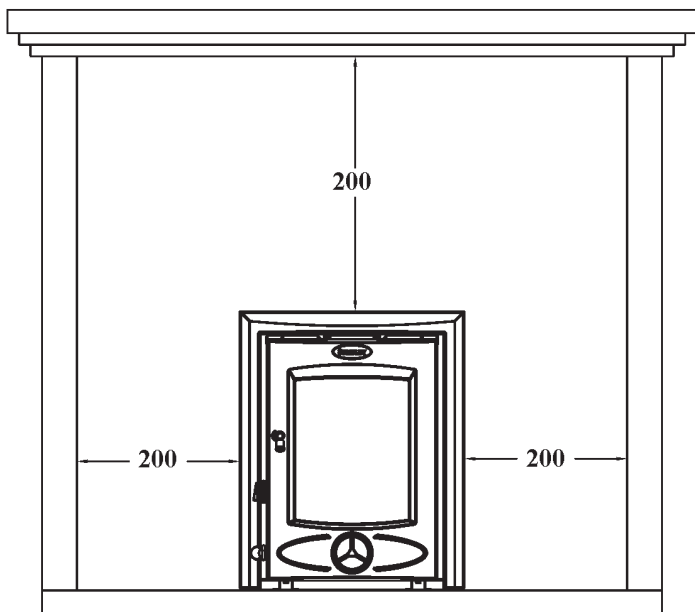


Fig.13

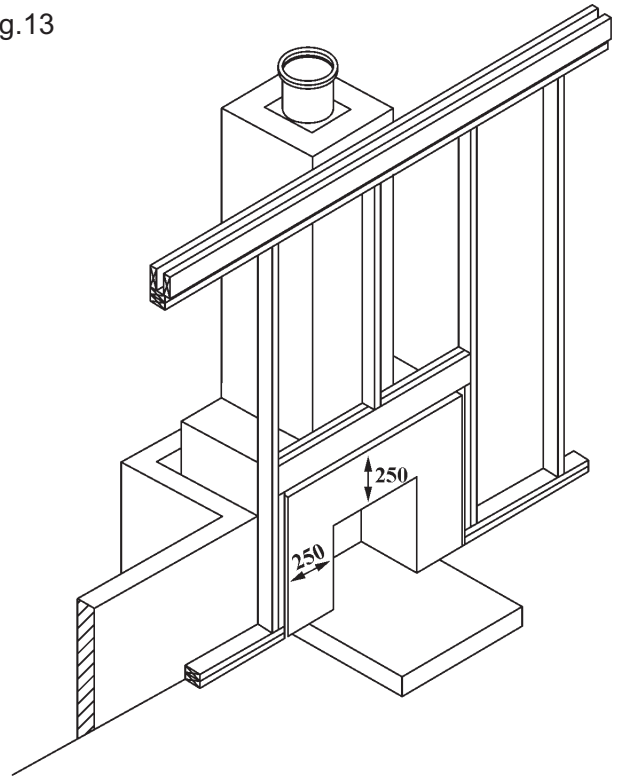
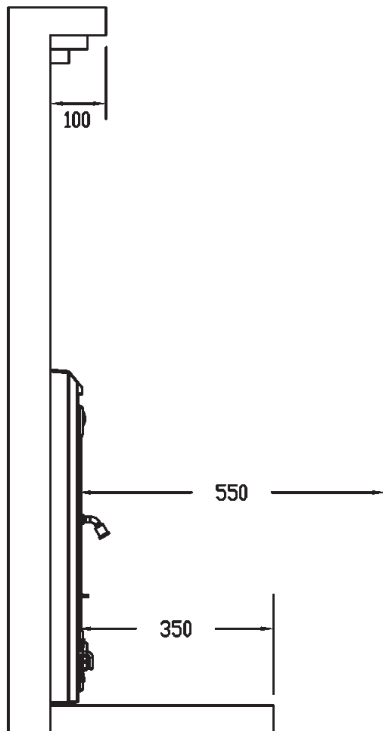


Fig.12



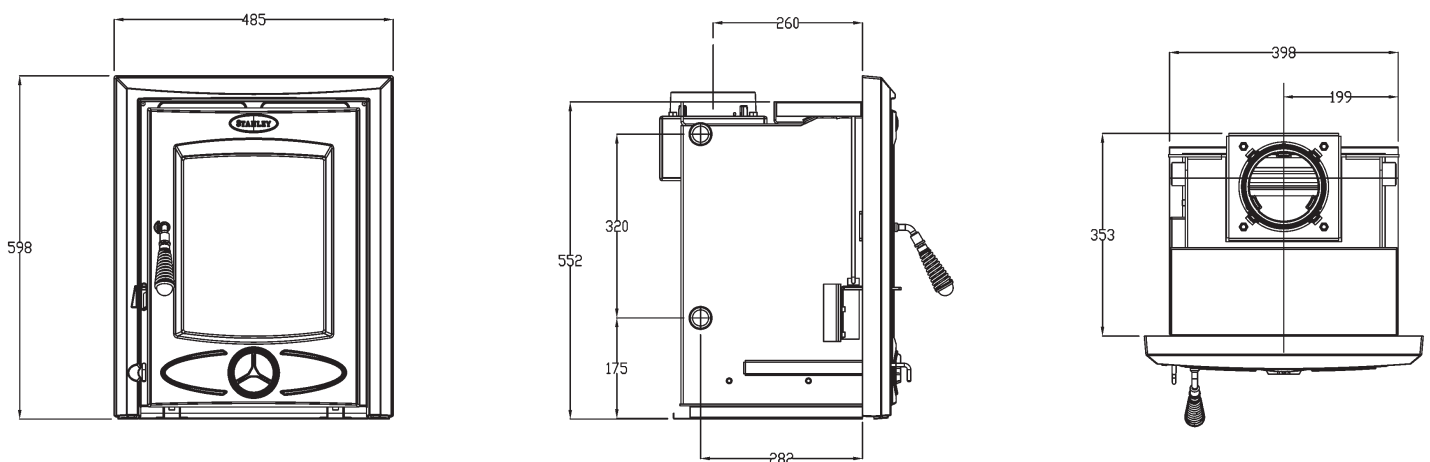
If there is a studded wall surrounding the fire-place as in Fig.13, ensure the clearances in this Fig are adhered to.

FLOOR PROTECTION

It is recommended that this appliance is installed on a solid, level, concrete base, a non combustible hearth conforming to current Building Regulations must extend to the front of the appliance.

STOVE DIMENSIONS

Fig.14



TECHNICAL DATA

Manufactured Smokeless Fuel:-	Room	Water	Total	
Max:-	2.0kW	7.0kW	9	
Nominal:-	1.2kW	4.0kW	5.2	
Typical refuelling intervals to obtain nominal outputs				MSF 4 hours
Flue Gas Mass Flow				MSF 4.2 g/s
Flue Gas temp at nominal output				162 °C
Gross Weight:				108 kgs
Flue Outlet:				125 mm
Flue Draught:				12 Pa
Efficiency:				80.4%
Log Size:				310 mm

PLUMBING (BOILER MODEL)

REGULATIONS

The plumbing must be in accordance with all relevant regulations and practices. It must include a gravity circuit with expansion pipe, open to the atmosphere. The central heating will normally be pump-driven as with other types of boilers.

GRAVITY CIRCUIT

The gravity circuit consists of the domestic hot water tank of 135 litres indirect cylinder, fixed in an upright position, recommended for hot water storage and it should be connected to the boiler by 28mm diameter flow and return piping. The pipes should not exceed 7.8 meters (25ft) in length and cylinder and pipework should be fully lagged. The shorter the run of pipe work the more effective the water heating.

There must be no gate valves on this circuit and it must have an expansion pipe exhausting to atmosphere. Cylinder and pipe work should be lagged to minimise heat loss.

This diagram illustrates the basic principal of water heating systems and must not be regarded as a working drawing. See Fig.15.

Fig.15

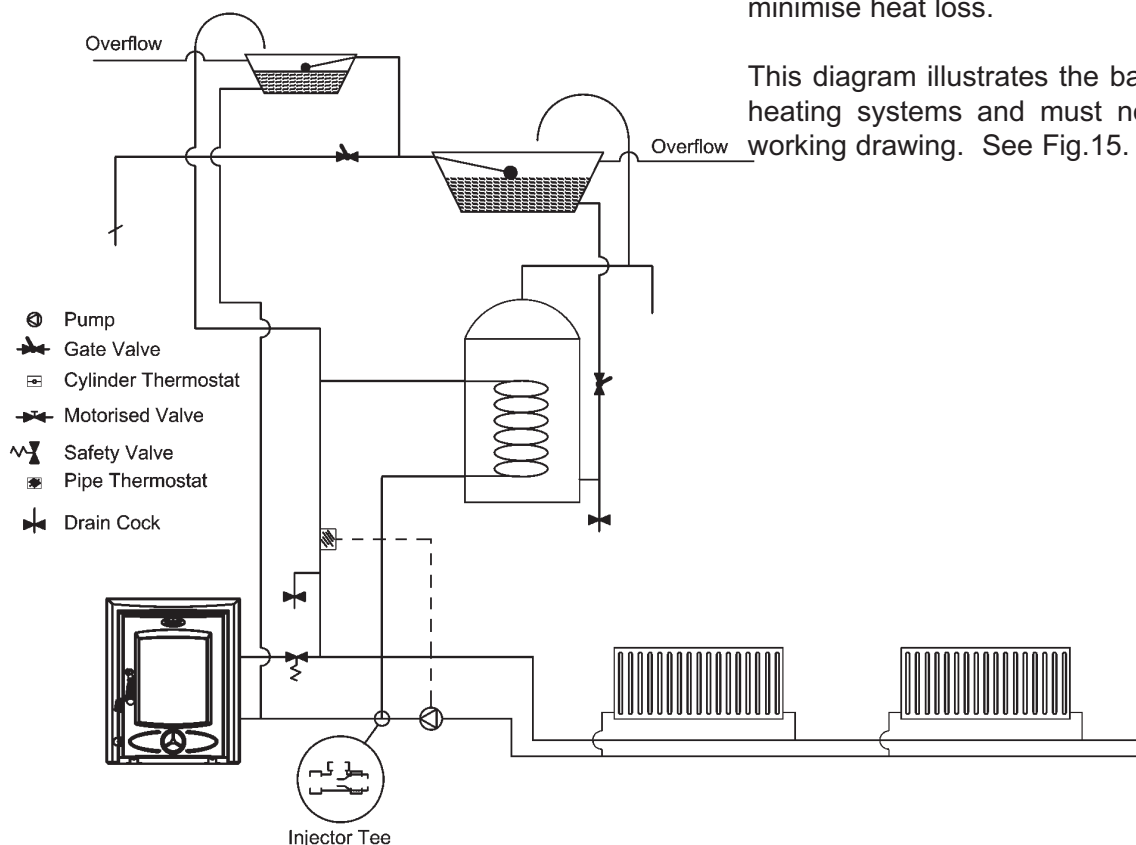
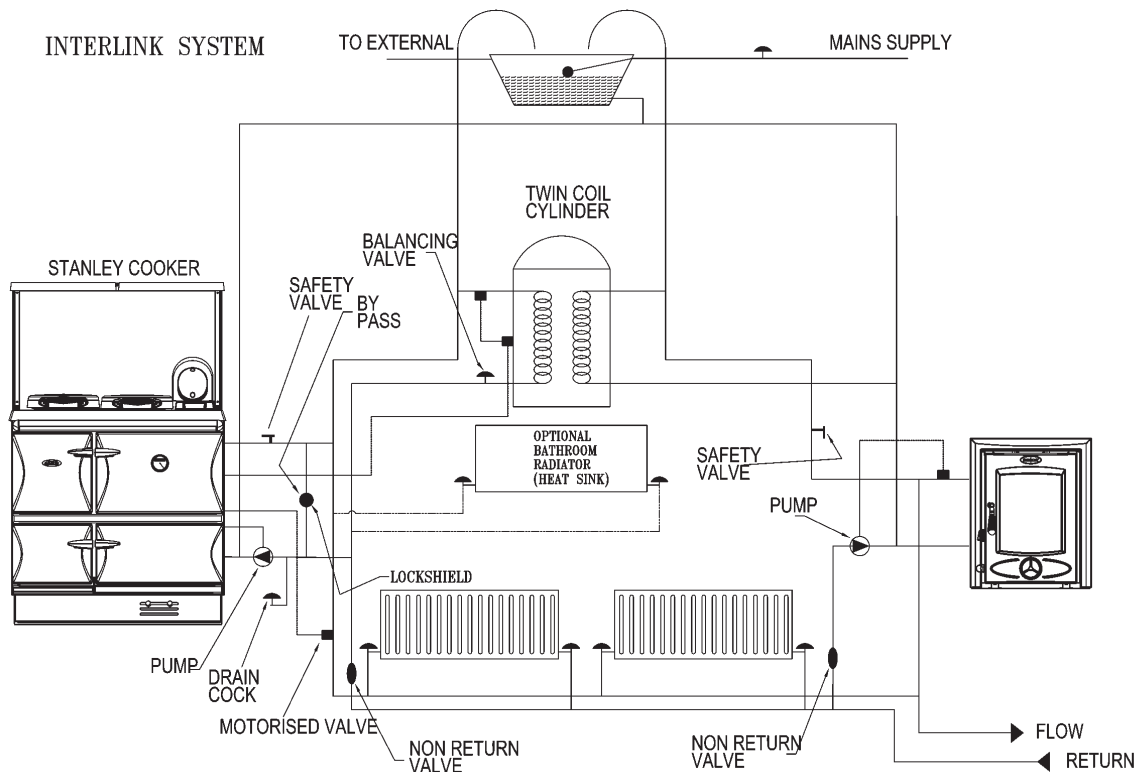


Fig.16



INJECTOR TEE

Where the gravity and central heating circuits join together to return to the stove we recommend the use of an injector tee connection, situated as close to the unit as possible. This type of tee encourages a stable flow of water through both circuits and helps to prevent priority being given to the stronger flow, which is most commonly the pumped central heating circuit.

WATER CIRCUIT TEMPERATURE

The return water temperature should be maintained at not less than 40°C so as to avoid condensation on the boiler and return piping. Fitting a pipe thermostat to the flow pipe of the gravity circuit and wiring it into the pump control will ensure rapid circulation of the hot water.

In some circumstances it may be possible to over-heat the appliance and the water inside will boil. This will be evident by the sound of a knocking noise coming from the appliance and pipes around the house. If this occurs close off all air controls and manually start the central heating pump if fitted. One radiator on the heating circuit should be uncontrolled to act as a heat leak in the event that the appliance overheats and has nowhere to discharge a build up of hot water should the heating circuit be satisfied. Be aware that steam and boiling water will be expended from any open vent from the heating system probably in the roof space at the expansion tank.

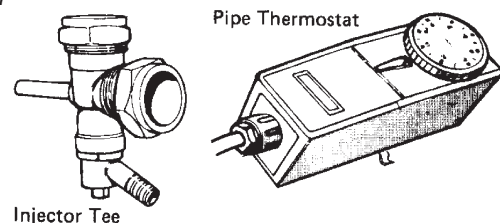
In the unlikely event that the appliance is not operating in freezing conditions the water must be drained from the boiler to prevent frost damage.

PIPE THERMOSTAT

The fitting of a pipe thermostat to the flow pipe is essential in order to activate the water circulation pump when the water reaches the selected temperature.

When the water temperature falls below the selected temperature the pipe thermostat will cut off the water circulation pump in order to allow the boiler to recover.

Fig.17



SECONDARY AIR CONTROL - SLIDER

When burning wood, push the secondary air slider situated on the left hand side of the door to the bottom of the slot. The air control is a slider operation, push the slider to the top of the slot for fully closed and to the bottom for fully open.

The control can be gradually moved between fully open and fully closed for the desired setting. Fully open will be the hottest setting, as this will provide

the maximum air to the fire and will help to clean the glass even after it has become sooty. This control can be used in conjunction with the spin valve but generally the fire will perform best if the slider is used when burning wood and the spin valve is used when burning manufactured smokeless fuels. These controls are hot when the appliance is in use. **Use the glove provided to operate air controls and door handle when they are hot.**

PRIMARY AIR CONTROL SPIN VALVE

When burning manufactured smokeless fuels, the spin valve located near the bottom of the door, controls the primary air supply to the stove. For maximum heat output and burn rate rotate the spin valve fully in an anti-clockwise direction. For a minimum burn rate rotate the spin valve fully in a clockwise direction until fully closed. For nominal heat output the spin wheel will need to be open about 2 turns depending on the draught conditions of the chimney. You will soon learn the spin valve settings to best suit your requirements.

Fig.18

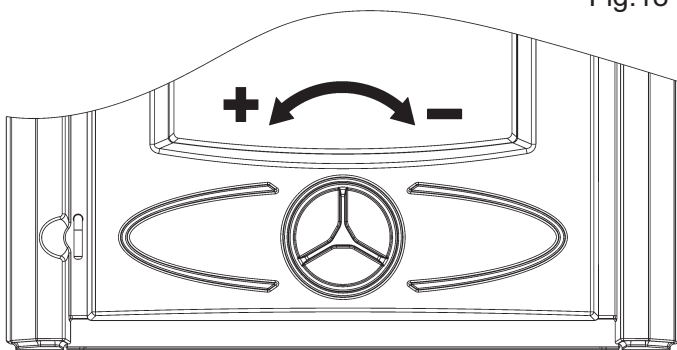
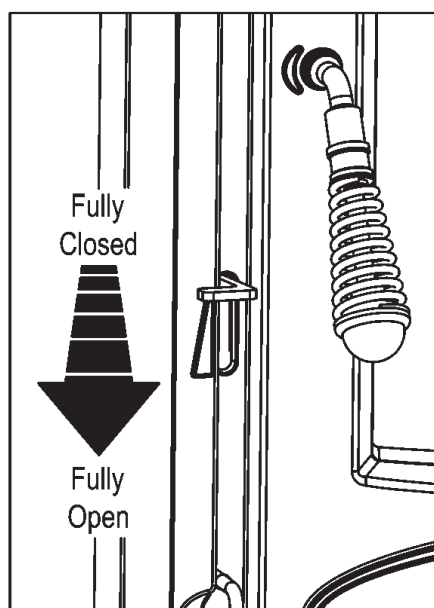


Fig.19



RECOMMENDED FUELS

This appliance has been tested using manufactured smokeless fuels. Other fuels are commercially available and may give similar results. Do not use fuels with a Petro-coke ingredient as this may cause the grate to overheat, causing damage. Reduced outputs will result when fuels of lower calorific value are used. All fuels should be stored under cover and kept as dry as possible prior to use.

DOOR HANDLE OPERATION

The stove is supplied with a detachable door handle. To open the door, insert the silver end of the handle into the door latch on the fire door, turn the handle clockwise and pull the door towards you. To close the door, insert the handle into the door latch as before, push the door closed, turn the handle anti-clockwise to engage the door catch and remove the door handle.

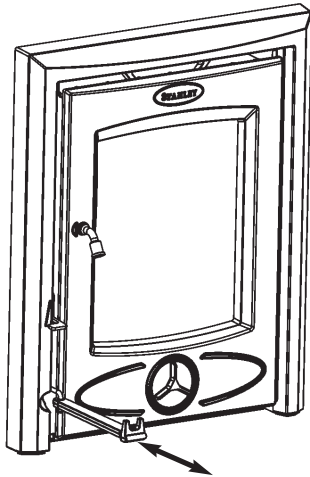
NOTE: THE DOOR HANDLE SHOULD NOT BE PERMANENTLY FIXED TO THE UNIT AND SHOULD ONLY BE USED AS OUTLINED ABOVE

RE-FUELLING

When refuelling with manufactured smokeless fuel riddle the fire by connecting the grate operating tool onto the rocker connection located at the bottom front of the stove, the grate must be in the open position before riddling. Then gently pull and push the rocker arm until all dead ash has fallen through into the ashpan. Before opening the door, open the spin valve by turning it anti-clockwise, as this will help to eliminate any smoke or fly ash resident in the combustion chamber. Add fuel to fire, taking care not to overfill higher than the front firebars. Close fire door and re-set spin valve to required setting. Do not operate this appliance with the fire door open. (See Fig.20)

When burning wood the requirement to riddle the fire is much less. Do not riddle the fire with the spin-wheel open but fully open the secondary air control instead. Remember to reset the controls after refuelling.

Fig.20



SLOW BURNING

To achieve slow burning when burning wood close the secondary air slide and open a few millimetres using the tool provided. Slow burning will cause the window glass to blacken and should not be used for a long period as it will leave sooty deposits in the flueways. Opening the air slide will increase the heat output and will clear the glass.

To obtain slow burning when burning coal, close the secondary air fully and partially open the spin valve.

DE-ASHING

Never allow the ashpan to over fill as it will cause damage to the grate. Empty the ashpan before lighting. Always ensure that ashes have thoroughly cooled before removing the ashpan. Open the fire door and remove ashpan using the operating tool. Close the fire door. When the ash is disposed of, replace the empty ashpan. (See Fig.21) Do not leave the fire unattended with the fire door open, even for a minute.

WARNING - NEVER DISPOSE OF ASH WHEN STOVE IS LIGHTING.

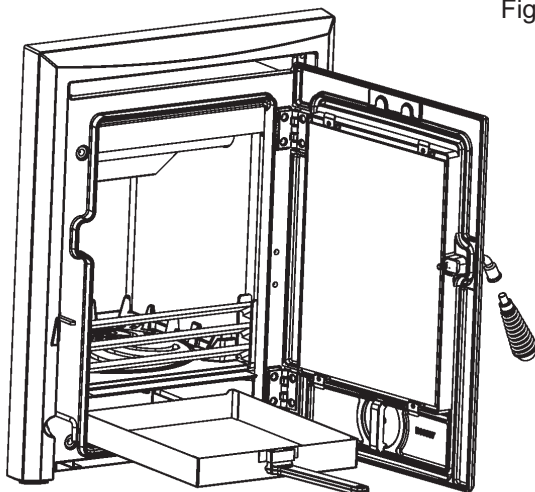


Fig.21

MAINTENANCE

CREOSOTE: Formation and Need for Removal

When some fuels are burned slowly, they produce tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited creosote makes an extremely hot fire.

CHIMNEY CLEANING

The chimney should be cleaned twice annually. The chimney can be cleaned through the stove by removing the fire lining and the baffle. The flue liner should be cleaned in accordance with manufacturers instructions. Always use a brush with plastic bristles that is the correct size to reach all areas of the flue.

REMEMBER COAL GASES ARE TOXIC

WARNING NOTE

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:

- (a) Open doors and windows to ventilate room and then leave the premises.
- (b) Let the fire out .
- (c) Check for flue or chimney blockage and clean if required.
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flue-way or chimney blockage. For your own safety these must be kept clean at all times.

IMPORTANT NOTES

Now that your Solid Fuel stove is installed and no doubt you are looking forward to many comforts it will provide, we would like to give you some tips on how to get the best results from your stove.

1. We would like if you could take some time to read the operating instructions/hints, which we are confident, will be of great benefit to you.

-
2. Do not burn fuel with a high moisture content, such as a damp peat or unseasoned timber. This will only result in a build up of tar in the stove and in the chimney and the possibility of a chimney fire.
 3. **CLEAN THE FLUE-WAYS OF THE STOVE EVERY WEEK AND ENSURE THAT THERE ARE NO BLOCKAGES. CHECK FLUEWAYS BEFORE LIGHTING ESPECIALLY AFTER A SHUT-DOWN PERIOD. PLEASE REFER TO MANUAL FOR INSTRUCTIONS.**
 4. Before loading fresh fuel into the firebox, riddle fully to remove all ashes this will allow better and cleaner burning. See Re-Fuelling Section.
 5. Never allow a build up of ashes in the ash pan, as this may cause the grate to burn out prematurely.
 6. Allow adequate air ventilation to ensure plenty of air for combustion.
 7. Do not burn rubbish/house hold plastic.
 8. Clean the chimney at least twice a year.
 9. Burning soft fuels such as timber and peat will stain the glass. Regular cleaning will prevent permanent staining.
 10. Keep all combustible materials a safe distance away from the appliance, please see section for clearances to combustibles.
 12. Never use Aerosols near stove when alight.
 11. For safety reasons never leave children or the elderly unaccompanied while stove is in use. Use a fireguard.
 12. Avoid contact with appliance when in use as the stove reaches very high operating temperatures.
 13. This appliance should be regularly maintained by a competent service engineer. Use only replacement parts recommended by Waterford Stanley. Using unauthorised parts will invalidate your guarantee and may cause damage or injury.

AN ODOUR WILL EMIT FROM STOVE ON FIRST FIRING, WHEN FIRE REACHES MAXIMUM TEMPERATURE OVER A NUMBER OF HOURS THIS ODOUR WILL SUBSIDE.

IT IS BEST ADVISED TO OPEN WINDOWS DURING THIS PERIOD.

THIS ODOUR IS UNPLEASANT BUT NOT TOXIC. YOU MAY WISH TO VACATE THE ROOM WHILE THE PAINT CURES.

LIGHTING

Before lighting the stove check with the installer that the installation work and commissioning checks described in the installation instructions have been carried out correctly and that the chimney has been swept clean, is sound and free from any obstructions. As part of the stoves commissioning and handover the installer should demonstrate how to operate the stove correctly.

IMPORTANT: The first few fires should be relatively small to permit the refractory to set properly and to season the stove.

1. Before lighting the stove, ensure that any build-up in the firebox has been removed and that the ashpan has been emptied.
2. Open the spin valve by turning it anti-clockwise. Open secondary air control by pulling it down. These parts will become hot. Use the tool provided.
3. Lay a few crumpled sheets of paper on the grate and then a few small sticks, kindling or an approved firelighter. Ignite and close the door.
4. Never use inflammable liquid i.e. gasoline, petrol paraffin etc. to start or freshen up a fire in this heater.
5. When the fire is well established add fuel to the firebox. Adjust to the desired setting the spin valve and / or the secondary air slide depending on the fuel burned. (See Re-Fuelling Section).
6. To shut the fire down, do not add fuel. Make sure that the fire door is properly closed, that the spin valve is firmly shut and the secondary air slide is pushed up. Cutting off the air supply will reduce the heat output.

CO ALARMS

Building Regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions.

Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under "Warning Note" below.

WARNING:-

If the CO Alarm sounds unexpectedly:-

- 1. Open Doors and windows to ventilate the room and then leave the premises.**
- 2. Let the fire go out.**

FIRE SAFETY

To provide reasonable fire safety the following should be given serious consideration:

1. The installation of smoke detectors.
2. A conveniently located fire extinguisher to contend with small fires resulting from burning embers.
3. A practical evacuation plan.
4. A plan to deal with a chimney fire as follows:
 - a. Notify the fire department.
 - b. Prepare occupants for immediate evacuation.
 - c. Close all openings into the stove.
 - d. While awaiting the fire department watch for ignition to adjacent combustibles from overhead stove pipe or from embers or from sparks from the chimney.

FROZEN SYSTEM

If there is any possibility that the water system may be frozen do not attempt to light the stove until you are certain there is no ice in the system possibly causing a blockage.

GLASS

1. How to clean:

The glass will clean itself when there is sufficient heat generated by burning fuel. If a build-up of creosote occurs on the glass it may be due to draft conditions, poor quality fuel or very slow burning for a long time. Only clean glass when the stove is thoroughly cooled. Clean with a liquid detergent taking care not to scratch the glass with any coal ash deposits.

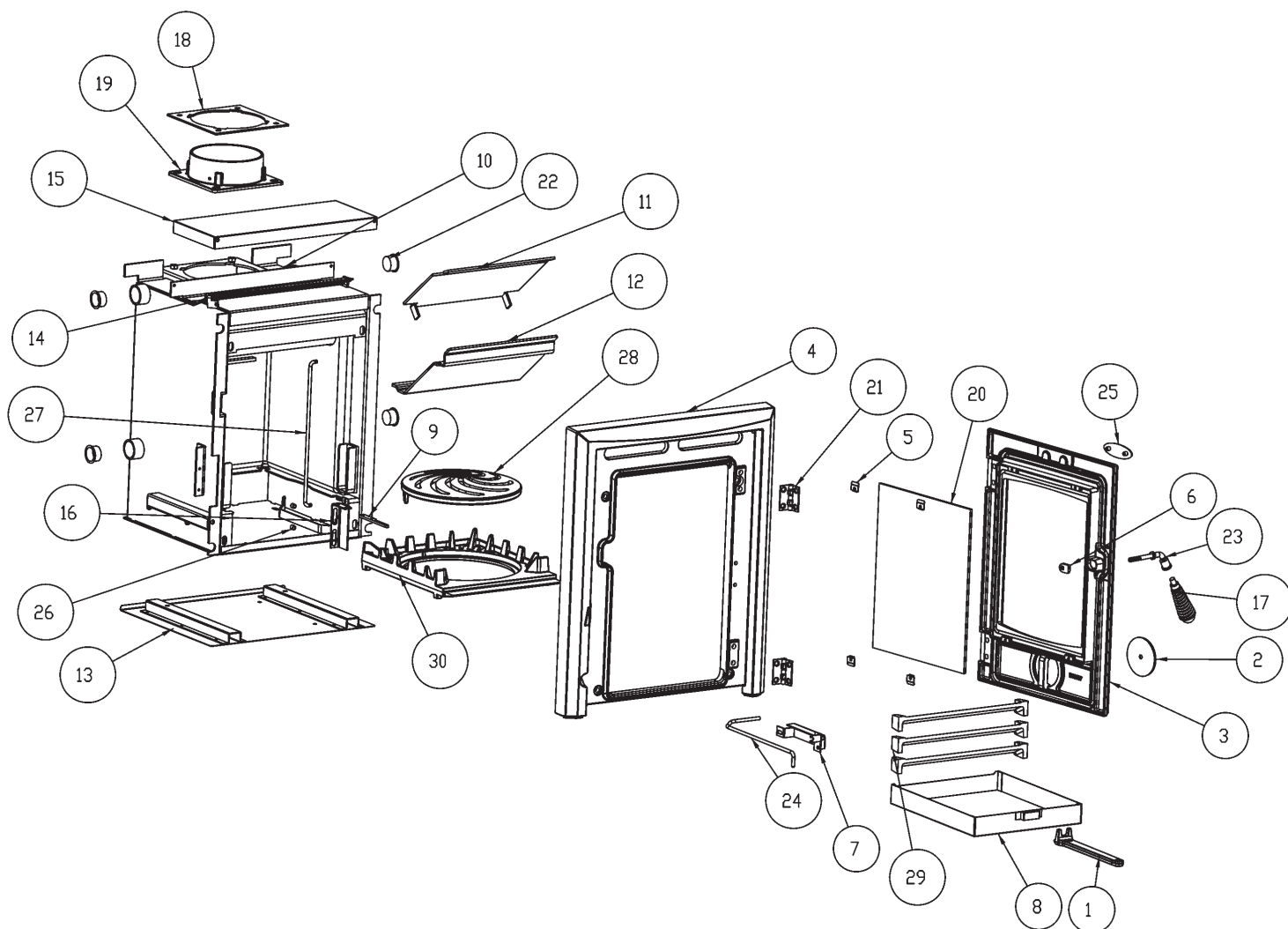
2. Glass Replacement:

- a. Open the door fully.
- b. Remove the clips and carefully remove the broken glass.
- c. Clean the glass recess in the door.
- d. Place the glass into the door recess and replace the four corner clips.
- e. Tighten screws.
- f. Replace glass only with ceramic glass 5mm thick

SUMMER SHUTDOWN

For summer shutdown of the stove, ensure all ashes have been cleaned from the ash compartment and that the air control is open, to avoid condensation in the stove firebox and possible corrosion during this shutdown period.

CARA BOILER INSERT STOVE EXPLODED VIEW



- | | |
|--|--|
| 1. OPERATING TOOL - B00009DXX | 16. DAMPER VALVE - F01064AXX |
| 2. SPIN VALVE - B00032AXX | 17. MIN SPRING HANDLE - L00539AXX |
| 3. FIRE DOOR - B00587AXX | 18. FLUE GASKET - P00102AXX |
| 4. FRONT - B00588AXX | 19. 5" FLUE - Q00752AXX |
| 5. WINDOW CLIP - F00896BXX | 20. 16" DOOR GLASS - T00098AXX |
| 6. DOOR CATCH - F00928AXX | 21. HINGE - U00153AXX |
| 7. PULL ROD SUPPORT BRACKET - F00992AXX | 22. BOILER PLUG - V00016AXX |
| 8. ASHPAN - F00997AXX | 23. DOOR AXLE - V00857AXX |
| 9. LEVER - F01007AXX | 24. PULLROD - V00911AXX |
| 10. BOILER - F01043AXX | 25. BADGE - V00912AXX |
| 11. TOP BAFFLE - F01045AXX | 26. SPACER - V00956AXX |
| 12. BOTTOM BAFFLE - F01046AXX | 27. VALVE CONNECTOR PIN - V00983AXX |
| 13. BASE PLATE - F01060AXX | 28. GRATE - Z00036AXX |
| 14. SECONDARY AIR VALVE - F01061AXX | 29. FIRE FENCE - Z00037AXX |
| 15. SECONDARY AIR COVER - F01062AXX | 30. GRATE - Z00044AXX |



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