

ESSE Cooking Stove

OPERATING & INSTALLATION INSTRUCTIONS

MODEL: EW/EWB

GUARANTEE

CONDITIONS OF GUARANTEE

Your **esse** cooker is guaranteed against defects arising from faulty manufacture for two years, subject to the following express conditions:

1. A suitably qualified person must install the cooker, and upon installation the details must be recorded on the warranty card and registered with **esse** by returning the correctly completed card. The guarantee period commences upon delivery of the cooker.
2. The cooker has been used for normal domestic purposes only, and in accordance with the manufacturer's instructions.
3. The cooker has not been serviced, maintained, repaired, taken apart, or tampered with by any person not authorised by us.
4. An approved dealer or representative must undertake all service work under this guarantee.
5. Any cooker or defective part replaced shall become the Company's property.

EXCLUSIONS

This guarantee does not cover:

- Damage or calls resulting from transportation, improper use or neglect.
- Parts deemed to be replaceable in the normal usage of the cooker. These parts are listed herewith: firebox linings, loading door glass, door seals.

This guarantee is personal to the original purchaser and is non-transferable.

CUSTOMER CARE

In the event you should require spare parts, please order through your esse dealer.

Should you have cause for dissatisfaction with your cooker, you should contact your esse dealer who will, in most instances, be able to offer you immediate assistance. You will be required to give the following details:

- Your name, address and postcode.
- Your telephone/contact details.
- Clear and concise details of the fault.
- Model and serial number of the cooker (found on the data plate behind lower right door).
- Purchase date (please note that a valid purchase receipt or guarantee documentation is required for in-guarantee service calls).

We will then check that we have an accurately completed warranty card, if not then any work carried out may be charged. The nature of the complaint will be assessed and either replacement parts for your dealer to fit, an engineer to inspect & report, or an engineer to remedy will be arranged. For any home visits that may be required, an appointment will be made for either morning or afternoon, Monday to Friday.

If the fault is not actually due to faulty workmanship but some other cause such as misuse or failure to install correctly, a charge will be made to cover the cost of the visit and any new parts required, even during the warranty period.



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INTRODUCTION

We are pleased that you have chosen an ESSE cooking stove. We would ask you to read the following instructions very carefully. Correctly installed and operated, your ESSE cooking stove will give satisfactory service for many years. We feel

certain that you will enjoy the warmth and comfort of your ESSE cooking stove and, perhaps more importantly, you will more than enjoy the superb quality of the cooking.

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OPERATING INSTRUCTIONS

SAFETY NOTES

- Properly installed, operated and maintained, this appliance will not emit fumes into the dwelling. However occasional fumes from de-ashing and re-fuelling may occur. Persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, open doors and windows to ventilate the room. Let the fire burn out or eject and safely dispose of fuel from the appliance. Once the fire is cold, check the flue and chimney for blockages and clean if required. Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. Seek expert advice if necessary.
- Do not fit an extractor fan in the same room as the appliance.
- An adequate air supply for combustion and ventilation is essential. Air openings provided for this purpose must not be restricted.
- It is important that flue ways are cleaned frequently and the chimney swept regularly. Also the cooking stove must be maintained in good

- mechanical order. Regular sweeping means at least once per year for smokeless fuel and a minimum of twice per year for other fuels.
- If the chimney was previously used for an open fire, it is possible that the higher flue gas temperatures generated by the cooking stove may loosen deposits that were firmly adhered to the inner surface of the chimney and cause blockage of the fluepipe. We recommend that in such a situation a second sweeping of the chimney should be carried out within one month of regular use of the cooking stove after installation.
- Should it be likely that children, aged or infirm people approach the fire, then a fireguard should be used.
- Avoid the use of aerosol sprays in the vicinity of the cooking stove when it is in operation.

Warning! The front of the cooking stove becomes very hot when in use. Do not place towels on the handrail when the cooking stove is alight and keep pets and kids away.

YOUR COOKING STOVE

The cooking stove - Fig.1

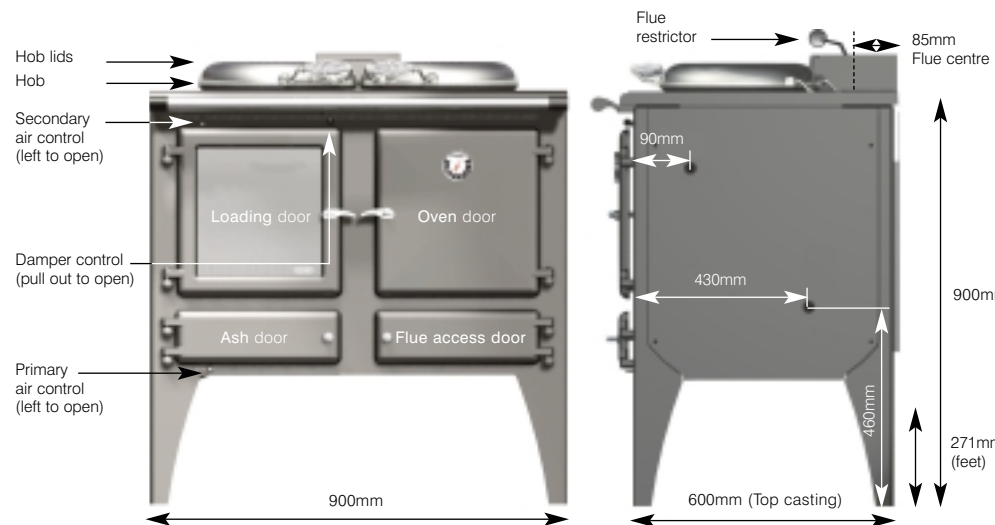


Figure 1 shows the cooking stove and its controls. The large glass door on the left is the loading door through which the fire is lighted and refuelled. The small door at the bottom on the left is the ash door. The large door to the right of the cooking stove is the oven and the small door at the bottom right is the oven flue access door.

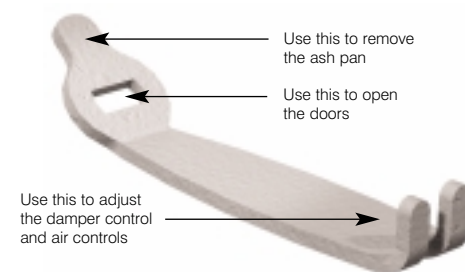
Included inside your cooking stove is a multi purpose-operating tool – for lifting the ash pan, adjusting the primary and secondary air supply and opening the doors.

The cooking stove is suitable for burning wood and smokeless solid fuels.

A flue restrictor (fig.1) is fitted in the bottom of the fluebox and is in the open position when lever is pointing to rear of cooker. This is used on initial light up and also gives a cooler oven temperature when open. It can also help to control excessive flue draught. This is done by pointing the lever to the front of the cooker.

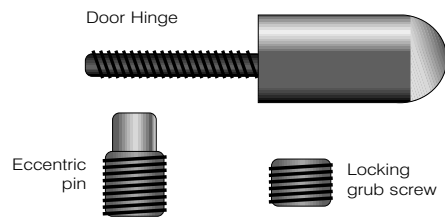
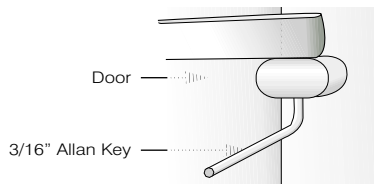
Note: Ordinary bituminous house coal is not recommended and must not be burned in smoke control areas. Burning bituminous house coal will result in a sooty cooking stove and chimney, and the cooking stove glass will require regular cleaning. Pure Petcoke should also be avoided as the high temperatures this fuel can produce may damage the cooking stove.

Operating tool - Fig.2



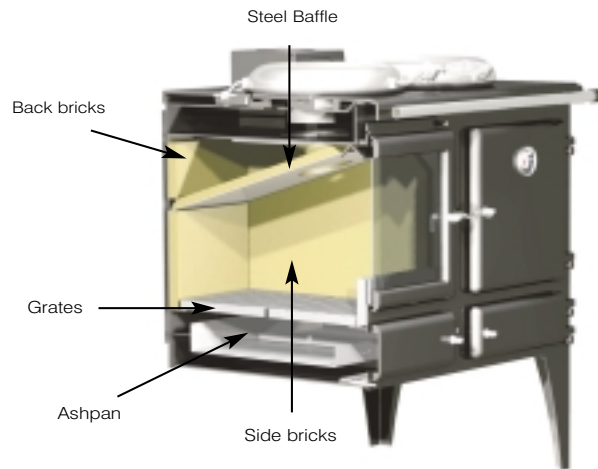
DOOR HINGE ADJUSTMENTS

- 1) Remove upper & lower locking grub screws from hinges using the 3/16" allen key provided.
- 2) Using the same allen key, adjust either or both eccentric pins in each door hinge to level the door.
- 3) Once the door is level, lock the eccentric pins in place using the locking grub screws.

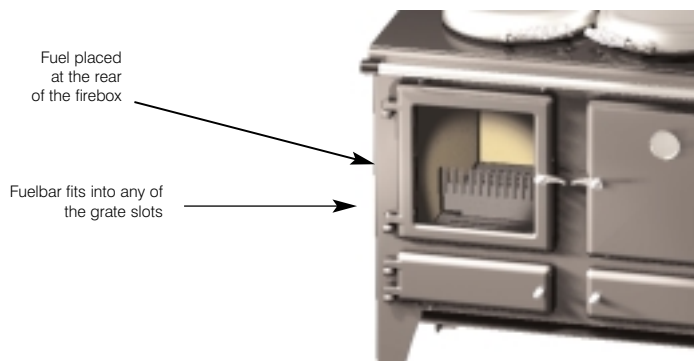


LIGHTING AND CONTROLLING THE FIRE

Firebox parts - Fig.3



Alternative flue bar positions - Fig.4



Before lighting ensure that all the internal components are in the correct position. (See Figure 3 above).

Open the ash door on the bottom left of the cooking stove by inserting the operating tool (See Figure 2 on page 3) into the handle slot and turning it in an anti-clockwise direction.

Figure 1 on page 3 shows the primary air control lever on the left. Push the lever left to open and right to close. To light the cooking stove the primary air control should be fully open.

Open the loading door by lifting the handle either manually or using the operating tool.

Figure 1 shows the secondary air control to the left and the damper control to the right. As with the primary air control, the secondary air control lever should be pushed left to open and right to close. The damper control is open when the knob is pulled out and closed when it is pushed in.

To light the cooking stove the secondary air control should be fully open and the damper control pulled out. The flue restrictor should be opened by pointing the lever to the rear of the cooker (fig.1). This will allow fumes to escape directly up the flue whilst the cooking stove warms up.

Place some tightly rolled paper on top of some crumpled paper on the base towards the back of the cooking stove. On top of this, place some small pieces of wood. Light the crumpled paper and close the door.

NOTES ON WOODBURNING

Wood burns most efficiently when the air for combustion is supplied from above the fire bed rather than below. The air supplied above the fire bed provides the oxygen necessary for the volatile gases (smoke), given off by the wood as it heats, to combust. This ensures that the gases are burnt and used to heat the appliance instead of being wasted up the chimney or condensing and forming tarry deposits inside the cooking stove, in the flue or on the loading door glass.

Running the cooking stove with the primary air control open and the secondary air control closed will provide oxygen for the wood to burn on the fire bed but will not provide air for the volatile

Warning! When the cooking stove is running the handle will become hot and the operating tool alone should then be used.

WOOD

Once the fire becomes established add some larger pieces of wood. As the cooking stove comes up to temperature close the primary air control.

The burning rate of the cooking stove can now be regulated by the rate at which fuel is added and by adjusting the secondary air control.

SOLID FUEL

Once the fire becomes established add some solid fuel. The rate at which solid fuel burns can be controlled by using the primary air control and by the amount of fuel added. The secondary air control will affect the burning rate to a lesser degree than the primary, but it should be left open where possible in order to keep deposits away from the glass window.

Whichever fuel is used, the damper control may be closed once the fire is established depending on oven requirements (See Operating the Oven and Hob on page 6).

gases above the fire bed to combust resulting in a smoky inefficient fire.

With the above in mind the cooking stove should ideally be run with the primary air inlet closed and the secondary air control open whenever possible. Another advantage of running the cooking stove with the air wash open is that the air being drawn into the cooking stove travels across the glass, forming an air barrier between the glass and the fire bed, helping to prevent smoke particles sticking to the glass.

If the fire dies down too low, opening the primary air control for a short period will revive it.

CORRECT RUNNING TEMPERATURES FOR WOOD BURNING

To get the best results from your cooking stove it is recommended that a wood stove thermometer (available from your cooking stove dealer) be fitted to the flue pipe above the cooking stove, at eye level if possible. The figures below show the recommended temperature of the flue gases:

115 °C - 245°C (240°F – 475°F)

The flue gases should be in this temperature band for the safest, most efficient and most economical operation of your cooking stove.

EXTENDED WOOD BURNING

Loading a large amount of wood into the cooking stove all at once will reduce the temperature inside. If the temperature is too low, the gases given off from the wood will be too low to combust, resulting in a lot of smoke which will cover the inside of the cooking stove, including the glass, with soot. To combat this problem it is a good idea to increase the temperature of the cooking stove before loading by further opening the air inlets. Load the wood and leave the air controls open until the moisture is driven out of the wood and the cooking stove is back up to an efficient operating temperature. The air inlets can then be

Below 115°C (240°F)

This is below the condensation point of wood gases and may cause the build up of tar in the chimney, dirty the cooking stove glass and result in the inefficient burning of fuel.

Above 245 °C (475°F)

Too hot. Heat will be wasted up the chimney. Excess heat may damage the cooking stove or ignite an existing accumulation of tar resulting in a chimney fire.

reduced to hold the temperature of the cooking stove. If excessive flue updraught is experienced, pull the flue restrictor lever to the front of the cooker to reduce the flue draught (fig.1). Loading the cooker stove little and often will help keep the cooking stove temperature steady.

Note: The above text should be used as a guide only. The ideal operation of your cooking stove depends on a number of factors, which vary with each installation, and so gaining experience operating your cooking stove is the only way to learn its best operation.

TYPES OF WOOD FOR FUEL

For best results use well seasoned hardwood such as Oak, Ash, or Beech. Allow wood to dry out under cover in well-ventilated conditions for at least twelve months. Wood is ready for burning when radial cracks appear in the end of the logs. Burning wood that is not seasoned will result in tar being deposited in the cooking stove, on the glass and in the flueways.

This build up of tar is a hazard and if it ignites may cause a chimney fire. Resinous softwood burns well and gives a high output for short periods but is not as efficient and does not last as long as hardwood.

PEAT

Peat is a fuel conveniently available in some areas

OPERATING THE OVEN AND HOB

The temperature of the hob is graduated from left to right. The left side is hotter and so is used for boiling and the right side for simmering. The oven door and the fire door are opened by lifting the handle either manually or using the operating tool. Both handles will become hot during operation when a cloth or the operating tool provided is recommended.

The oven and hob are heated directly by the fire. In order to heat up the oven and hob the fire should be lit as described above. Once the fire is established the flue damper should be pushed in. This will allow the hot fumes from the fire to circulate around the inner cavity between the cooking stove and the oven thus heating up both the hob and the oven.

The hob lids can be left down when the hob is not being used in order to keep the hotplates warm. In the up position they will allow more heat into the room.

To reduce the heat going to the oven when the

cooking stove is up and running, the flue damper knob can be pulled out. This will allow the hot fumes to escape directly up the chimney via the boiling side of the hotplate, thus reducing the heat to the oven but maintaining a hot hotplate.

To maintain a good cooking temperature in the oven requires only a small amount of fuel. To reduce the effective size of the firebox, the fuel bar can be moved towards the back and thus used to hold a smaller amount of fuel at the rear of the firebox, see Figure 4 on page 4. This also has the advantage of reducing the heat radiated through the window, making life easier for the cook.

The temperature gauge on the oven door provides an indication of the oven temperature. It should be noted however that since the gauge is attached to the door it will drop if the door is left open for any prolonged period, in which case, the oven may be hotter than is indicated on the dial. Once the door is closed again the gauge will come back to temperature.

CLEANING THE COOKING STOVE

The cooking stove should only be cleaned when it is cold. The exterior can be dusted with a firm brush. Do not use a cloth to clean, as this will drag on the paint finish leaving lint on the surface.

As the cooking stove top is used for cooking, normal wear and tear will occur. Spills should be mopped up immediately with a damp cloth, but oven cleaners should not be used on the hob surface.

The exterior of the cooking stove is painted with high temperature cooking stove paint and from time to time it may become necessary to renovate the exterior by repainting. The surface must be prepared by rubbing down with a wire brush. The cooking stove paint will not key to the surface if there are fat deposits or food particles on the area to be resprayed. High temperature cooking stove paints are available in aerosol form from your cooking stove dealer. Do not use this paint until the cooking stove is completely cold and always follow the instructions on the container before starting to

paint. The usual precautions should be taken, such as covering adjoining surfaces and protecting the hob lids.

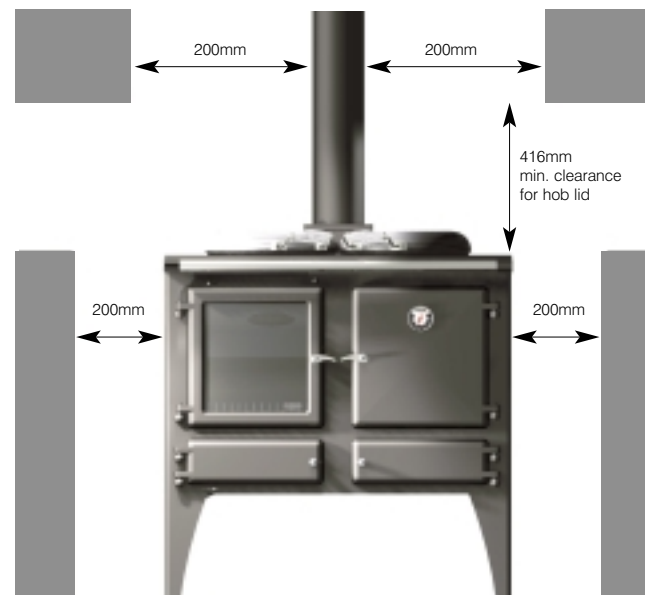
The hob lids are made from stainless steel. These have been treated with oil at the factory to prevent fingerprints and marks forming. The lids can be wiped clean with a damp cloth and proprietary stainless steel cleaners may be used. It is recommended that after such cleaning, the lids be again treated with oil by wiping over with a lint free cloth. This will prevent fingerprints and smears. Baby oil or similar is recommended for this purpose.

The loading door glass should stay relatively clean if the correct type of fuel is used as described above, but from time to time this can be cleaned when cold with a proprietary glass cleaner and a dry cloth, or depending on soot build up, a nylon pan scourer. Vinegar and newspaper may also successfully be used.

HOT WATER SYSTEM

- A) There are two connections, both 1" BSP Male – on the left hand side one connection for hot water. The storage cylinder should be 30 gallon nominal capacity insulated to prevent Heat loss and as close to the cooker as possible. Follow general notes below item (C) (6), (7) & (8).
- B) The EWB or DE-LUXE boiler is plain mild steel and capable of running a radiator in addition to domestic hot water. Follow all general notes.
- C) General Notes on Water System: -
- 1) The cooker will produce hot water at differing rates depending on how it is operated. Heating control is manual, no thermostat is fitted.
 - 2) The system must be designed to cope with loads between the maximum and minimum output. When the central heating load is turned off there must be sufficient gravity load to absorb 15,000 Btu/h for periods when the oven is being used for cooking, e.g. Domestic hot water plus gravity operated radiator.
 - 3) An indirect storage cylinder is essential for domestic hot water supply, irrespective of whether the water supply is hard or soft. Minimum capacity 30 gallons. Cylinder should be as close to cooker as possible.
 - 4) The central heating circuit may be gravity circulation, but a pumped system is preferred. To allow heat from the boiler to be absorbed should there be a pump stoppage on an accelerated circuit, the primary domestic supply must be gravity operated.
 - 5) Installation as a central heating system alone, i.e. without a domestic supply, is not recommended as the boiler will produce heat when the cooker is in use, irrespective of central heating demand, and primary absorption must be provided.
 - 6) Whichever system is chosen the layout must follow established heating engineering practice. To avoid trapping air in the boiler a 1" BSP connection must be used on the flow trapping, and any reduction in pipe size thereafter being made on a vertical rising pipe. The cooker must be level when fitted and the flow pipe must rise from the boiler. A drain cock must be fitted on the lowest point of the return pipe and a vent to atmosphere at the highest point of each circuit.
 - 7) The cylinder and pipe work should be lagged to avoid heat loss.
 - 8) The static head must not exceed 60 feet of water.

INSTALLATION INSTRUCTIONS



Clearances - Fig.5

Clearance to the back wall can be zero if non-combustible. For a wall containing any combustible material the clearance should be 400mm.

The installer has a responsibility under the Health and Safety at Work Act 1974 to provide for the safety of persons carrying out the installation. Attention is drawn to the fact that fire cement is caustic and hands must be washed thoroughly after use. The appliance is heavy and care must be taken during handling. Although the appliance does not contain asbestos products, it is possible that asbestos may be disturbed in existing installations and every precaution must be taken.

These instructions give a guide for the installation of the appliance but in no way absolves the installer

from responsibilities to conform to British Standards, in particular BS8303 and BS6461, relating to the installation of solid fuel appliances. The installation should also comply with local Building Regulations and Local Authority Bye-Laws.

Any adjacent combustible material should be far enough away from the cooking stove so as not to rise 60°C above the room temperature when the cooking stove is in operation. If necessary, any adjoining walls should be protected from the effects of heat.

CHIMNEY AND FLUE

The successful operation of the cooking stove relies on the adequate performance of the chimney to which it is connected. The chimney must:

- Have an internal cross section of no less than 320 cm.sq (200mm dia.). (If a flue liner is used it should be 6" diameter and suitable for solid fuel).
- Be a minimum 4.6m high from hearth level to pot.
- Be terminated at least 1m above roof level so that the chimney does not terminate in a pressure zone. See Figure 6 on page 10.
- Be free from cracks, severe bends, voids, and obstructions.
- Be connected to this one appliance only.
- New chimneys must be built in accordance with local building regulations.

- If the cooking stove is installed as a freestanding appliance, it should not support any part of the chimney.
- Voids in the chimney should be avoided as these will prevent a steady flue draught. The cooking stove flue pipe should pass beyond the narrowing of the chimney.
- A flue/chimney access point may also be required so that the state of the chimney can be checked and any fallen soot removed.
- External flues must be insulated to prevent heat loss.

FLUE DRAUGHT

The chimney can be checked, before the cooking stove is installed, with a smoke match. If the chimney doesn't pull the smoke it may suggest the chimney needs attention (see the Flue Diagnosis Table on page 11).

Note: This test is only a guide as an apparently poor flue may improve once the cooking stove is installed, lit and the flue is warmed. If, once the cooking stove is installed, there is any doubt that the chimney is providing an adequate draught, a flue draught reading should be taken.

FLUE DRAUGHT READING

Two flue draught readings should be taken, one with the cooking stove at minimum firing rate and one at maximum firing rate. The flue draught test hole must be drilled in the flue pipe as close to the cooking stove as possible and before any flue draught stabiliser.

MINIMUM

The cooking stove should be lit and allowed to warm the flue thoroughly. The air controls can then be set so that the cooking stove burns on a low setting. Allow the burning rate to become steady. The flue draught reading should now be taken with the primary air intake closed and the secondary air control fully open.

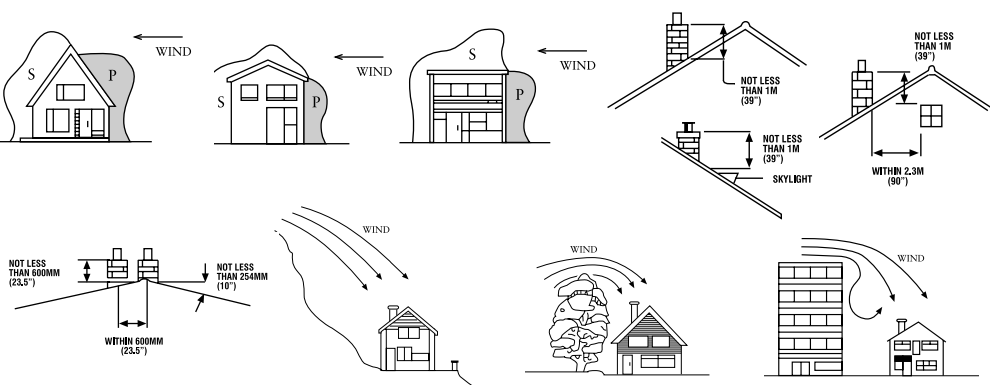
MAXIMUM

The primary air intake can now be opened to allow the cooking stove to burn at maximum rate. Give the cooking stove some time for the burning rate to become steady and then close the primary air intake. Make sure the secondary air control is fully open and take a flue draught reading immediately.

Ideally, the flue draught readings should range between 1 mm wg (0.04 in wg) and 2.5 mm wg (0.1 in wg).

Any readings significantly outside this range may indicate the need for remedial action.

Chimney and Flue - Fig.6



Low flue draught symptoms: difficult to light and smoke coming into the room.	
Cause	Remedy
Cold chimney	Line the chimney
Chimney too short	Extend the chimney
Down draught	Relocate/extend chimney terminal. Fit an anti down draught cowl
Chimney diameter too large	Line the chimney
Chimney obstruction	Clear/sweep the chimney
Restricted air supply	Check for competing draughts (other chimneys, extractor hoods/fans). Fit an air vent if the room is sealed.
High flue draught symptoms: fire difficult to control, fuel will not last, cooking stove too hot, cooking stove damage, chimney fire	
Cause	Remedy
External wind conditions combined with chimney terminal	Fit stabilizer cowl. Fit flue draught stabilizer.

FLUE STABILIZER

A flue stabilizer can be fitted to reduce the draught through the cooking stove if the flue draught is too high. The flue stabilizer should be fitted in the

same room as the cooking stove, be the same size as the flue pipe and be fitted no closer than 700mm to the flue outlet of the appliance.

INSTALLING THE COOKING STOVE

POSITIONING

The overall dimensions of the cooking stove are shown in Figure 1 on page 3. Figure 4 on page 4 shows recommended distances between the cooking stove and surrounding flammable materials. As a rule, any surrounding flammable material should not exceed 60°C above ambient room temperature.

FLUE CONNECTION

The flue pipe used to connect the cooking stove to the chimney is 6" (150mm) in diameter.

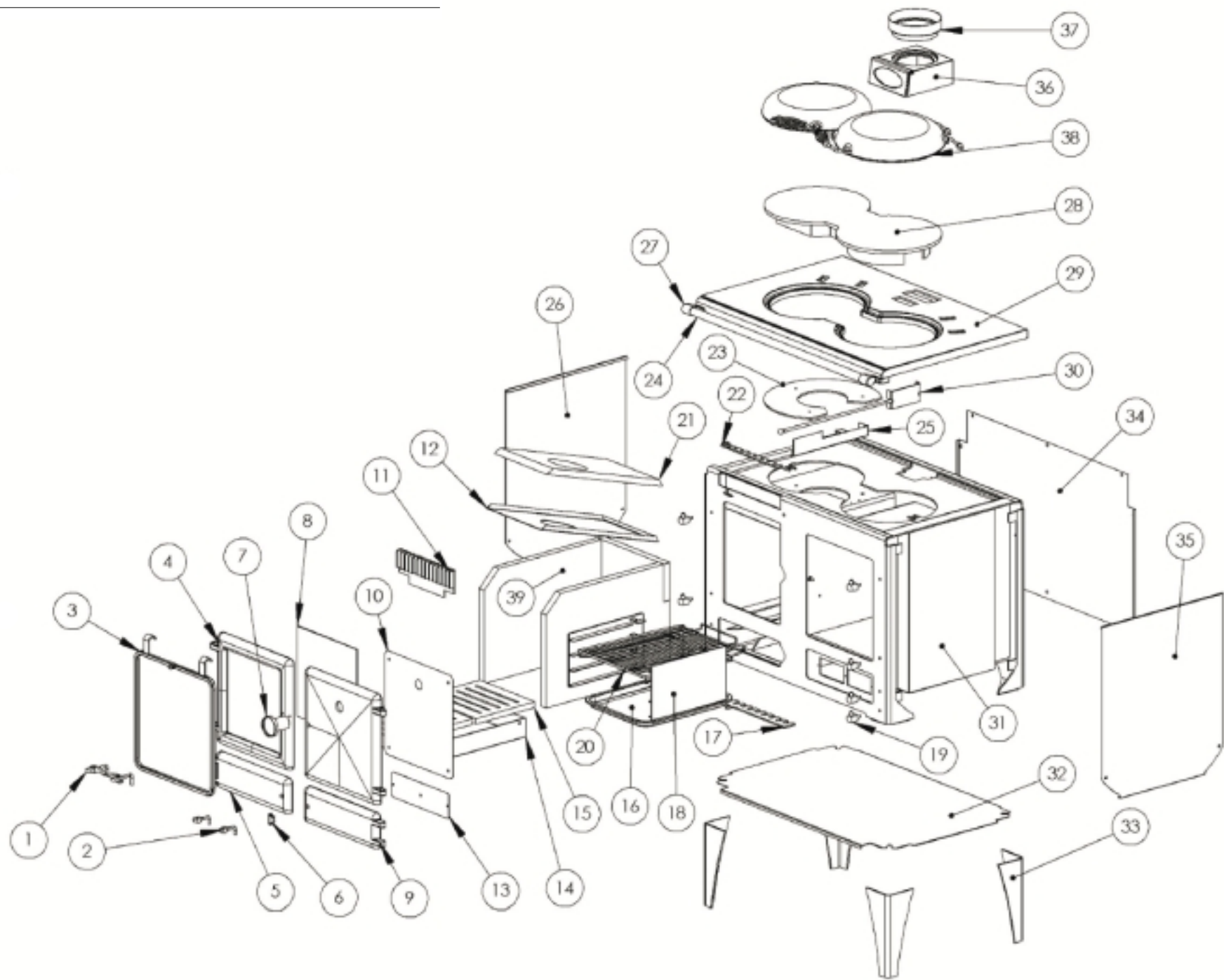
The flue connection is on the top of the cooking stove, in the center at the back.

IMPORTANT INSTALLATION NOTES:

1. The installation must allow for adequate chimney sweeping.
2. Avoid using bends greater than 45° to the vertical. All flue pipe sections should be as close to vertical as possible.
3. All joints in the flue system must be effectively sealed.
4. All flue sockets must face upwards. On completing the installation, check that all the internal components of the cooking stove are positioned correctly. Check: Grate, baffle, ash pan, insulation bricks, fuel bar. See Figure 3 on page 4.

SPARE PARTS

- 1 Upper Door Handles
- 2 Lower Door Handles
- 3 Fire Guard
- 4 Cast Fire Door
- 5 Ash Door
- 6 Magnet Catch
- 7 Temperature Clock
- 8 Ceramic Glass Window
- 9 Flue Access Door
- 10 Oven Door Liner
- 11 Fuel Guard
- 12 Stainless Baffle
- 13 Flue Access Plate
- 14 Ashpan
- 15 Grate
- 16 Oven Tray
- 17 Lower Slider
- 18 Cast Shelf Supports
- 19 Door Hinge Assembly
- 20 Wire Shelf
- 21 Steel Baffle
- 22 Upper Slider
- 23 Flue Heat Shield
- 24 Hand Rail
- 25 Flue Restrictor Guide
- 26 Side Panel
- 27 Hand Rail Bracket
- 28 Hotplate
- 29 Cast Top
- 30 Flue Restrictor
- 31 Stove Body
- 32 Bottom Heat Shield
- 33 Legs
- 34 Rear Heat Shield
- 35 Side Panel
- 36 Cast Flue Box and Door
- 37 5" to 6" Adaptor
- 38 Bolster Lid Assembly
- 39 Fire Bricks
- 40 Cast Iron Door
- 41 Charcoal Spray Can



COMMISSIONING RECORD

Engineers Name	<input type="text"/>	Date	<input type="text"/>
Address	<input type="text"/>		
	<input type="text"/>		
Tel No.	<input type="text"/>	Fax No.	<input type="text"/>
HETAS/Reg No.	<input type="text"/>		

SERVICE RECORD

Engineers Name	<input type="text"/>	Date	<input type="text"/>
Address	<input type="text"/>		
	<input type="text"/>		
Tel No.	<input type="text"/>	Fax No.	<input type="text"/>
HETAS/Reg No.	<input type="text"/>		

Engineers Name	<input type="text"/>	Date	<input type="text"/>
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