

# THE SEVERN

## Operating Instructions for Freestanding Severn Stove with Boiler



### Consumer Protection Act 1987

As manufacturers and suppliers of cooking and heating products, in compliance with Section 10 of the Consumer Protection Act 1987, we take every care to ensure as far as is reasonably practicable, that these products are so designed and constructed as to meet the general safety requirement when properly used and installed. To this end, our products are thoroughly tested and examined before despatch.

**IMPORTANT NOTICE:** Any alteration that is not approved by Aga-Rayburn, could invalidate the approval of the appliance, operation of the warranty and could also affect your statutory rights.

### Control of Substances - Health and Safety Important

This appliance may contain some of the materials that are indicated below. It is the Users/Installers responsibility to ensure that the necessary personal protective clothing is worn when

handling, where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

**Firebricks, Fuel beds, Artificial Fuels** - when handling use disposable gloves.

**Fire Cement** - when handling use disposable gloves.

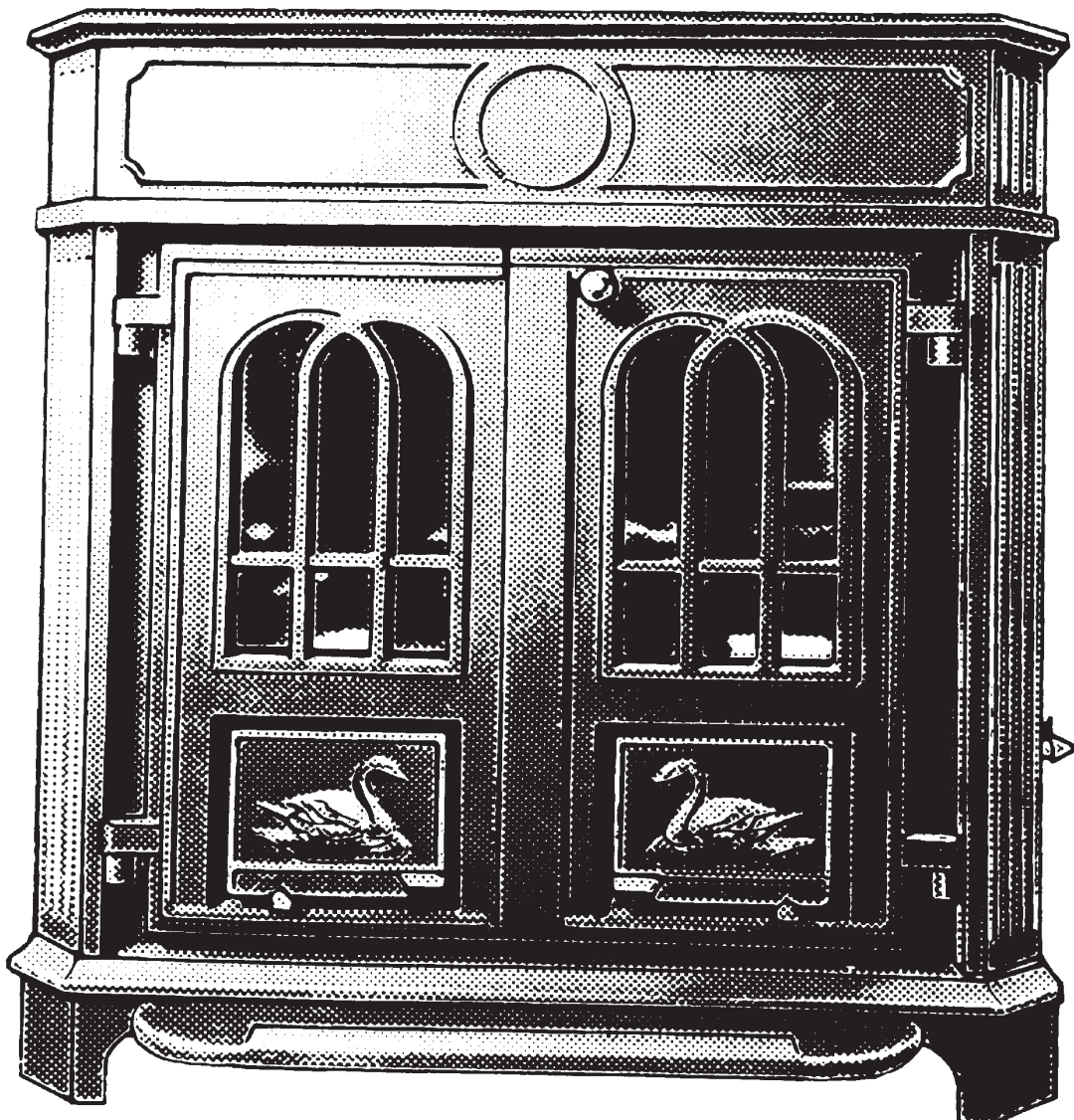
**Glues and Sealants** - exercise caution - if these are still in liquid form use face-mask and disposable gloves.

**Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre, Kerosene Oil** - may be harmful if inhaled, may be irritating to skin, eyes nose and throat. When handling avoid inhaling and contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.

### WARNING

### BOILER MODEL

UNDER NO CIRCUMSTANCES MUST THE  
APPLIANCE BE FIRED DRY AS DAMAGE  
WILL OCCUR



## Recommended Fuels

Smokeless - Phurnacite Plus, Supacite, Centurion, Coalite (Nuts), Maxibrite, Phurnacite, Sunbrite (Doubles), Extracite, Pureheat, Blazebrite, Taybrite, Anthracite (Large Nuts), Welsh Dry Steam Coal (Large Nuts).

## Selected Bituminous - Doubles, Trebles PETROLEUM COKE MUST NOT BE USED.

The appliance user should check with their installer that the chimney has been examined and confirmed for soundness, the chimney has been swept prior to the stove installation and is free of any obstructions.

The freestanding Severn Stove with boiler has been approved by HETAS LTD, any may be used for any of the following:-

1. Space heating and combined domestic hot water supply and radiators.
  2. Space heating and heating of pipes and radiators only.
- NOTE: MOST TYPES OF LOGS AND BLOCKS MAY BE USED PROVIDING THEY HAVE BEEN DRIED AND ARE WELL SEASONED, IDEALLY SOFT WOODS SHOULD BE BURNED IN THE DAYTIME AND HARD WOOD OVERNIGHT.**

**WARNING: WET WOOD SHOULD NOT BE USED AS CREOSOTE AND TAR-LIKE DEPOSITS FROM THE WOOD ARE INCREASED TO A LEVEL WHICH CAN GIVE RISE TO ADVERSE OPERATING CONDITIONS. FUELS SHOULD BE STORED UNDER COVER.**

**NOTE: REFER PROBLEMS ABOUT FUEL SUITABILITY OR QUALITY TO FUEL SUPPLIER.**

**IMPORTANT: FUELS SHOULD BE OF THE CORRECT SIZE FOR THE STOVE OTHERWISE THE APPLIANCE WILL NOT GIVE A SATISFACTORY PERFORMANCE.**

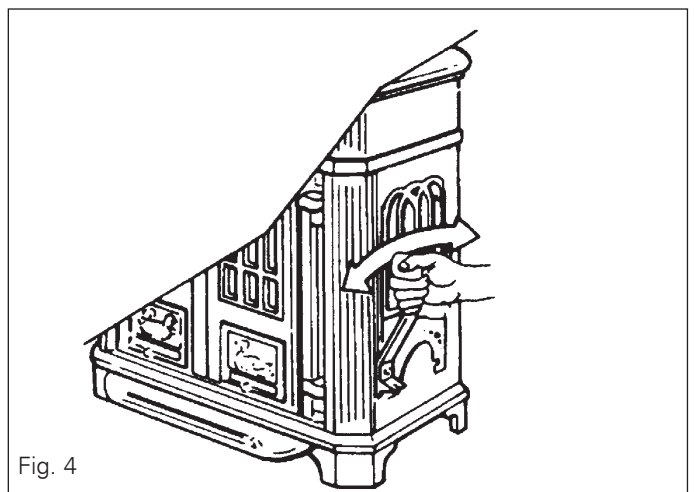
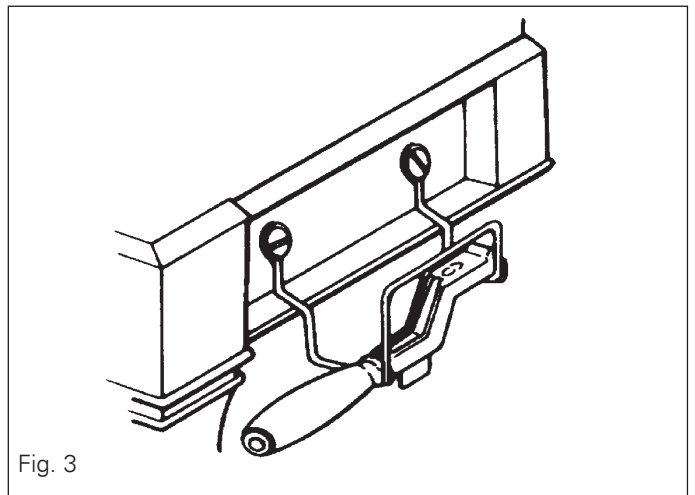
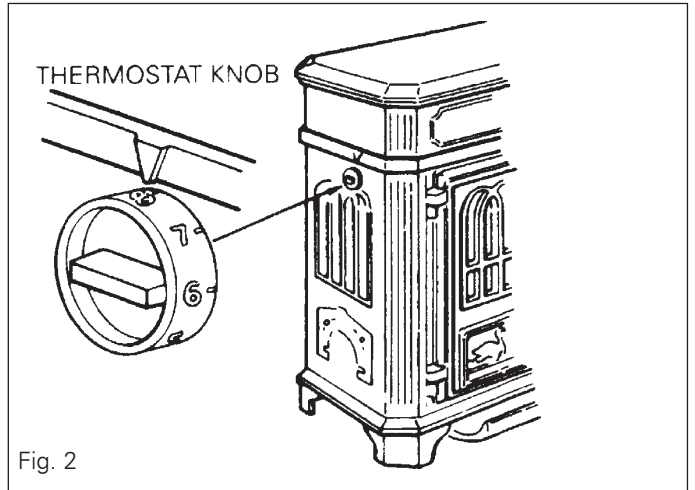
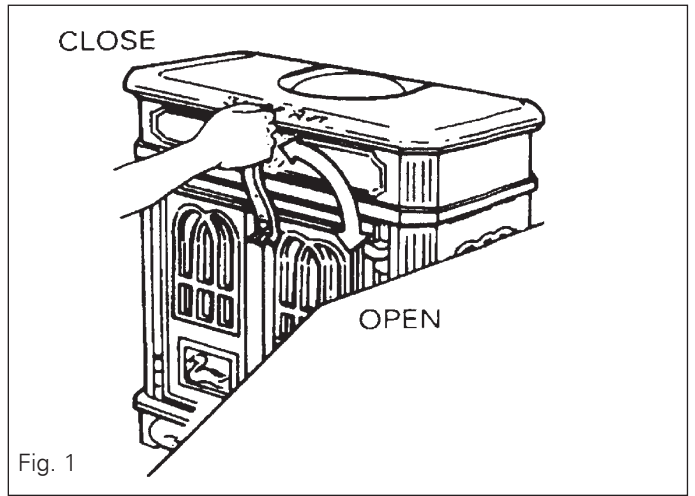
## TO LIGHT THE FIRE

- a. Open the firedoor, Fig. 1
- b. Lay a liberal supply of wood/paper on the grate together with a small quantity of fuel and light the paper. Alternatively place four firelighters equally spaced across the grate. Cover with fuel and light.
- c. Close and lock both firedoors. See Fig. 1 and set the thermostat knob to high (No.8) Fig. 2.
- d. With the fire established open the firedoors, fill firebox up to the top of the front firebar and sloping upwards to the back.
- e. Close and lock the firedoors. Fig. 1 with the operating tool. **THIS IS ESSENTIAL TO ACHIEVE CONTINUAL SAFE RUNNING EFFICIENT OPERATION OF THE STOVE.**
- f. Adjust the thermostat knob, Fig. 2 to give the desired rate of burning.
- g. Replace operating tool on its support cradle when not in use. See Fig. 3.

## Bituminous Fuel

If bituminous fuel is to be burnt the following procedure **MUST** be adhered to:-

1. Fuel must be refuelled to the maximum limit ie. at 30° incline from the front edge of the top firebar.



2. The doors must be left slightly ajar until the top of the fuelbed has flames passing through it.
3. The appliance doors should be then closed and locked.

**WARNING: IF THE DOORS ARE CLOSED TOO EARLY, THEN PUFF-BACK CAN BE EXPERIENCED. THESE ARE SMALL EXPLOSIONS WHERE SMOKE COULD BE FORCED THROUGH THE DOOR SEAL OR AIR INLET INTO THE ROOM. THE APPLIANCE MUST NOT BE LEFT UNATTENDED OR OPERATED FOR LONG PERIODS WITH THE DOORS OPEN AS THIS COULD CAUSE PHYSICAL DAMAGE TO THE APPLIANCE.**

## TO REGULATE BURNING

Maximum burning rate is obtained with the thermostat control knob set to 8 (high) and (1) low minimum rate. Adjust as required to suit the fuel and the heating desired. A fully fueled fire will last four hours (when burning solid fuel) at the maximum recommended burning rate before refuelling is required. Avoid clinker formation which indicates overfiring and **always check that the fire door is locked.**

## OVERNIGHT BANKING AND DAYTIME SLOW BURNING

De-ash thoroughly refuelling and ensure there is a sufficient amount of hot fuel in the firebed before loading. Fuel fire up to the top of the front firebar sloping the firebed upwards to the back of the firebox.

Close or nearly close the thermostat by setting the knob to No. 1 setting. Experience will indicate the setting that provides the best results with the fuel being burnt.

**NOTE: DIFFICULTY ON OBTAINING BANKING CAN BE SOMETIMES OVERCOME BY THE USE OF SMALLER SIZE FUEL E.G. SUNBRITE SINGLES.**

## WATER HEATING

The supply of hot water is dependent on the rate of burning and is greatest with the thermostat set at 8 (high), and least when the thermostat is set at 1 (low). The boiler is designed to heat radiators as well as supply domestic hot water. Fuel consumption will be higher when heating radiators and these should be turned off when not required. If your central heating pump is controlled by an axillary clamp-on thermostat fitted to the heating return side close to the stove. **PLEASE DO NOT ADJUST FROM ITS INTENDED SETTING OF 50°C (122°F).**

## DE-ASHING AND ASH REMOVAL

- a. Riddle the bottomgrate by engaging the operating tool on the riddling shaft - Fig. 4 and rotate/reverse it sharply for about 10 strokes by which time the fire should be free of ash. Riddle the grate at least twice daily (more often if required) and always before re-fuelling.
- b. Open the locked fire doors with the operating tool. Fig. 1

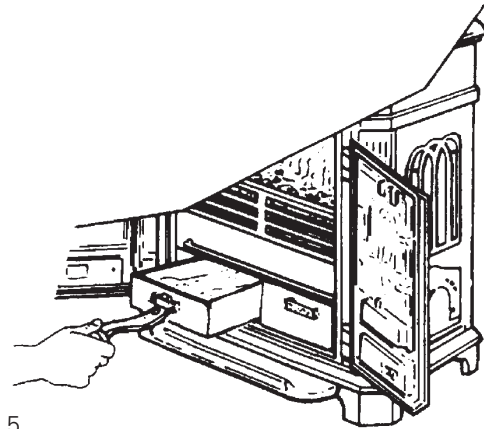


Fig. 5

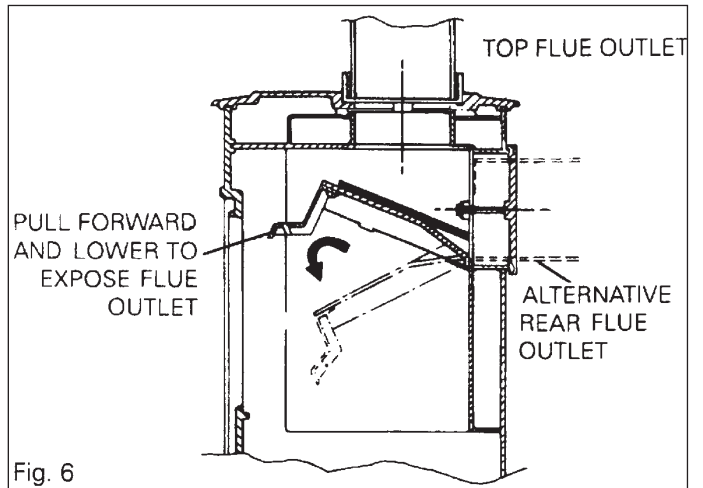


Fig. 6

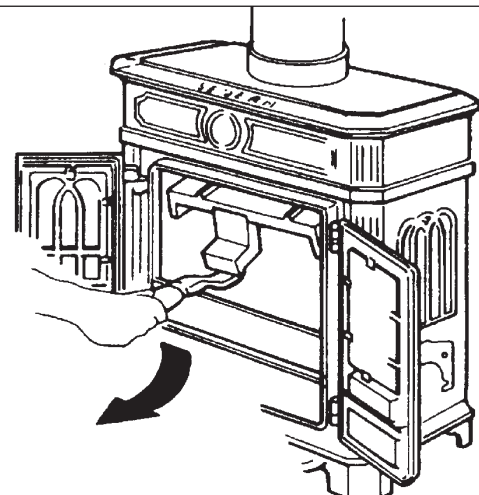


Fig. 7

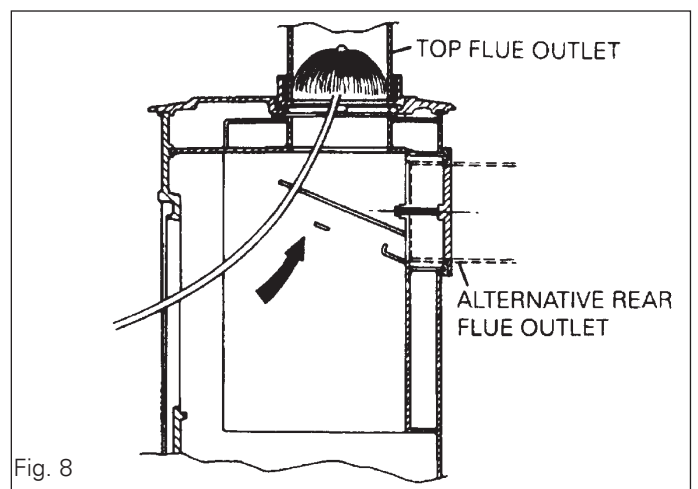


Fig. 8

- c. Remove either the ashpan with the operating tool. See Fig. 5

Allow to cool before placing contents in a plastic bin or liner.  
**NOTE: EMPTY THE ASHPANS AT REGULAR INTERVALS AND DO NOT ALLOW ASH TO ACCUMULATE IN THE ASHPAN UNTIL IT TOUCHES THE UNDERSIDE OF THE BOTTOMGRATE OTHERWISE IT WILL VERY SOON DESTROY THE BOTTOMGRATE.**

The continued presence of shale, stone or clinker in the firebed will reduce burning rates.

To remove shale or stone from the firebed, open the firedoor and rake the fire upwards with a poker to bring the shale or stone to the top and remove with tongs.

The type of fuel and the thermostat setting govern the frequency of fuelling.

## FUME EMISSION

**WARNING: PROPERLY INSTALLED AND OPERATED THIS APPLIANCE WILL NOT EMIT FUMES. OCCASIONAL FUMES FROM DE-ASHING AND RE-FUELLING MAY OCCUR.**

**PERSISTENT FUME EMISSION MUST NOT BE TOLERATED.**

**IF FUME EMISSION DOES PERSIST, THEN THE FOLLOWING IMMEDIATE ACTIONS SHOULD BE TAKEN.**

- a. Open doors and windows to ventilate room.
- b. Let the fire out or eject and safely dispose of fuel from appliance.
- c. Check for flue or chimney blockage, and clean if required.
- d. Do not attempt to relight the fire until the cause of fume has been identified, if necessary seek professional advice.

## APPLIANCE CLEANING (Flyash Removal)

**SWEEP MONTHLY - SEE FIGS. 6, 7, 8 AND 9.**

The top of the throat plate and flue pipe outlet should be swept on a monthly basis to prevent flyash deposits restricting the flueway and prevent fume emission and reduced burning rates.

- a. Open the firedoor, remove the front firebars and bottomgrate bars.
  - a. (i) **Top Flue Outlet**  
 Draw throat plate forward about 25mm and gently swing it downwards to a still position to expose top flue outlet. Figs 6 and 7.  
 Insert flexible brush into the top flue outlet and brush deposits downwards into firebox. Fig.8.
  - b. (ii) **Back Flue Outlet**  
 Draw throat plate forward about 25mm and gently swing it downwards to a still position to expose the rear flue outlet. Figs 6 and 7.  
 Insert flexible flue brush into the rear flue outlet and brush deposits towards firebox. Fig. 9.

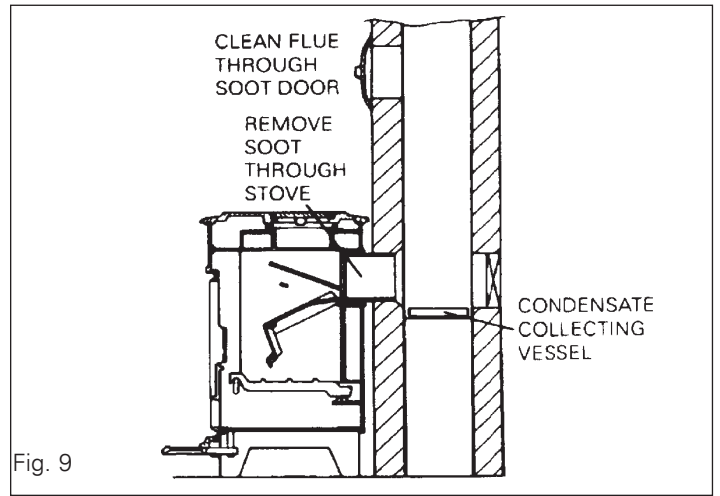


Fig. 9

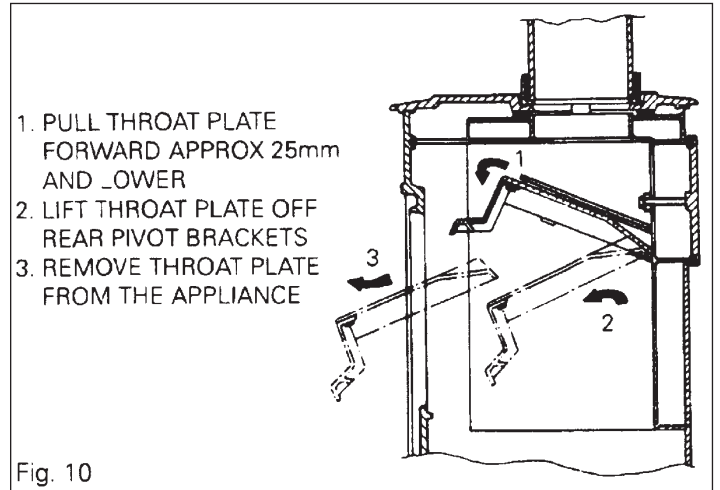


Fig. 10

- c. Return throat plate to original position then replace front firebars and close firedoor.

## FLUEWAY CLEANING

**SWEEP ANNUALLY SEE FIGS. 8, 9 AND 10**

**WARNING: NEGLECT OF CHIMNEY SWEEPING CAN LEAD TO DANGEROUS FUME EMISSION**

**Top Flue Only** The chimney can only be swept through the appliance front.

**Back Flue Only Against Chimney** The chimney must be swept through the soot door above the appliance and the soot removed through the appliance.

**Back Flue Only in Recess** The chimney is swept through the flue elbow cleaning door and the soot can be removed through the appliance.

- a. Open the firedoors and remove the front firebar and bottomgrate bars.
- b. Draw throat plate forward about 25mm allowing it to partially swing downward. Support the weight of the throat plate front, lift hinged end about 13mm and draw plate through appliance door aperture. Fig. 8.
- c. Insert the chimney sweeping brush into the main flue via soot cleaning door entry or through the flue pipe where possible. Ensure the deposits are separately collected or fall into the firebox for removal. Replace the removed components using the reverse procedure of removal.

## APPLIANCE CLEANING - GENERAL

Use a damp sponge or proprietary brand of cleaner to clean outside of stove. **DO NOT CLEAN THE STOVE WHEN IT IS HOT.**

With use the inside face of the glass doors may become coated with dust and deposits. To clean glass, allow to cool and then wipe it with a damp cloth and polish with a dry one.

## SERVICING

1. Always use a qualified service engineer when service is required.
2. An inspection of both firedoor seals should be made every heating season and replaced if necessary.

## PRECAUTIONS

When not in use remove all the fuel and ashes from the firebox. Leave the thermostat knob at a high setting (No.8) to allow a constant stream of air to pass through the stove. If the fire is not used when there is a danger of frost, the whole system should be drained.

Never light the fire if the water system is frozen.

Replace the individual bottomgrate bars as and when they burn to ensure sufficient burning.

Replacement parts if required are available through your local stockist.

## SPARE PARTS

### Severn Stove with Boiler

Part No.	Description	No. Required
HS5M-S413A	Front Firebar (Upper)	1
HS5M-S413	Front Firebar (Upper)	1
HS5B-D358	Bottomgrate (Upper)	7
HS5B-D353	Bottomgrate (Lower)	8
HS1M400000	Ashpan - LH	1
HS1M400001	Ashpan - RH	1
HS5-17720	Throat Plate	1
HS5M0-30825	Firedoor Glass Panels	2
RS4T 46070	Boiler Thermostat	1
HS4M 33984	Boiler Thermostat Knob	1



## AMENDMENT SHEET

### **EOPI 33724 - The Darby Boiler and Non-Boiler Model**

**Delete - PAGE 1 - Section: FUELS - Smokeless**

**Replace with:** Smokeless - Sunbrite Doubles, Coalite, Phurnacite, Supacite, Welsh Dry Steam Coal (Large Nuts), Anthracite Large Nuts.

### **EOPI 33720 - The Rembrandt 16" & 18"**

**Delete - PAGE 1 - Section: Recommended Fuels**

**Replace with:** Welsh Dry Steam Coal (Large Nuts), House Coal-Trebles or Doubles. Manufactured fuel such as Coalite, Homefire, Homefire Ovals, Newflame and Supacite

### **EOPI 33740 - The Severn Stove**

**Delete - PAGE 2 - Section: Recommended Fuels**

**Replace with:** Smokeless - Ancit, Centurion, Coalite (Nuts), Maxibrite, Phurnacite, Supacite, Sunbrite (Doubles), Extracite, Pureheat, Blazeprite, Anthracite (Large Nuts), Welsh Dry Steam Coal (Large Nuts).

### **EOPI 33743 - The Severn Stove - Boiler Model**

**Delete - PAGE 2 - Section: Recommended Fuels**

**Replace with:** Smokeless - Phurnacite Plus, Supacite, Centurion, Coalite (Nuts), Maxibrite, Phurnacite, Sunbrite (Doubles), Extracite, Pureheat, Blazeprite, Taybrite, Anthracite (Large Nuts), Welsh Dry Steam Coal (Large Nuts).

### **EOPI 33732 - The Much Wenlock Stove - Boiler Model**

**Delete - PAGE 2 - Section: Recommended Fuels**

**Replace with:** Smokeless (Manufactured) - "Phurnacite Plus", "Centurion", "Coalite" Nuts, "Maxibrite", "Phurnacite", "Sunbrite" (Doubles), "Extracite", "Blazeprite", "Taybrite" and "Supacite".

Natural: Anthracite Large Nuts, Welsh Dry Steam Coal (Large Nuts).

### **EOPI 33733 - The Much Wenlock**

**Delete - PAGE 1 - Section: Fuels - Smokeless**

**Replace with:** Smokeless (Manufactured) - "Phurnacite Plus", "Supacite", "Centurion", "Coalite" Nuts, "Maxibrite", "Phurnacite", "Sunbrite" Doubles, "Extracite", "Blazeprite", "Taybrite" Natural, Anthracite Large Nuts, Welsh Dry Steam Coal (Large Nuts).

### **EOPI 511711 - Coalbrookdale - The Little Wenlock 3**

**Delete - PAGE 1 - Section: Recommended Fuels**

**Replace with:** Smokeless - Ancit, Centurion, Coalite (Nuts), Maxibrite, Phurnacite, Sunbrite (Doubles), Extracite, Supacite, Blazeprite, Anthracite (Large Nuts), Welsh Dry Steam Coal (Large Nuts)

**For further advice or information contact  
your local distributor/stockist**

With Aga-Rayburn's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliance described and illustrated at any time.



Manufactured By  
Aga-Rayburn  
Station Road  
Ketley Telford  
Shropshire TF1 5AQ  
England

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