

Operating Instructions

ESSE 700 27B

Your Stove

Figure: 1 shows the stove and controls



Additional loose parts supplied inside your stove include
A multi-purpose operating tool for removing the ash pan & adjusting the air wash control is supplied. Also a glove for holding the tool is included.



700 27B model

Before lighting your stove ensure your boiler and heating system have been filled with water and rust inhibitor.

Wood

- Should be dry and well seasoned, tarry deposits will form inside the firebox and on the boiler and cause corrosion if the wood is unsuitable.
- Hardwood is better than soft wood.

Lighting & Controlling the fire

Before lighting the fire for the first time ensure the side and back bricks and steel plates are all in position, the wood burning plate is under the cast iron grate and the front plate is in the upright position.

Operation without either of the above being correctly positioned will result in the stove overheating and being damaged.

Open the air wash control and the thermostatic air control fully. Place some pieces of fire lighter on top of the grate, on top place some small dry kindling wood towards the back of the stove. On top of this, place some small pieces of wood. Light the fire and close the door. Once the fire becomes established add some logs. As the stove comes up to the required temperature the thermostat will maintain the pre-set temperature on the dial. The output of the stove can now be regulated by the rate at which fuel is added and by adjusting the air wash control and the thermostat.

The knob for the thermostatic air control is located on the left hand side of the stove between the legs. The air wash control is located at the top left side on the stove.

The thermostatic air control.

The thermostat knob is marked I, to 8 and the setting is positioned against the edge of the support bracket holding the mechanism.

Air supply is controlled by a thermostat in the boiler water and this controls the fire at a steady rate depending on the setting of the control knob. As the water temperature increases, the thermostat reduces the air supply to the fire and automatically maintains the water temperature at the desired level as long as the firebox contains fuel for combustion.

Setting No1 is the lowest setting and gives a water temperature of about 50 °c. Setting no 8 is the highest and gives a water temperature of 85 c. Intermediate settings give proportional temperatures increasing by about 5 degrees centigrade between each setting.

Smoke or fume

When the stove is correctly installed and operated it should not smoke or fume out. However some fumes may be evident during de-ashing and re-fuelling. Should these conditions prevail do not carry on using the appliance until the cause has been identified. Common causes are flue / chimney blockages or draught related. Contact your installer.

Cold water temperatures

Should the radiators or the domestic hot water feel cold, the pump speed may need re-setting or the heating system may require attention. Contact your installer/heating engineer.

De-ashing

Use the Tool to open the fire doors, engage the tool in the ash pan and pull forward till clear of the stove before emptying.

Note: 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 stove instead of being wasted up the chimney or condensing and forming tarry deposits inside the stove, in the flue or on the stove glass and boiler surfaces.

Another advantage of running the stove with the air wash open is that the air being drawn into the 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. After several fires staining around the wood burning plate level may become apparent.

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

Correct running temperatures for wood burning

To get the best results from your stove it is recommended that a wood stove thermometer (available from your stove dealer) be fitted to the flue pipe above the 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 stove.

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 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 stove or ignite an existing accumulation of tar resulting in a chimney fire.

Extended burning

Loading a large amount of wood into the stove all at once will reduce the temperature inside the stove. 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 covering the inside of the stove, including the glass, with soot. To combat this problem it is a good idea to increase the temperature of the 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 stove is back up to an efficient operating temperature. The air inlets can then be reduced to hold the temperature of the stove. Loading the stove little and often will help keep the stove temperature steady. When loading wood, make sure that the end grain of the wood in the stove is pointing away from the glass otherwise the moisture and gases coming from the end grain of the wood will dirty the glass.

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

Extended Burning cont'd

Before adding a large amount of fuel, the grate should be de-ashed and the ash pan emptied. Add the fuel to a level of the back of the stove. Open the thermostatic air inlet and let the fire burn for a period on high rate in order to get the stove back up to temperature and drive off the moisture and gases in the fuel. If a lot of smoke is produced on reloading, the air wash control can be opened further to keep the smoke back from the glass. As the fire gets back up to temperature, reduce the air wash control and reduce the thermostatic air inlet to suit the burning rate. The exact setting of the thermostatic air control depends on a number of variables including; the flue draught, the fuel used and the installation and so the best settings for your stove can only be learned by experience.

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 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. Larger logs are better to use than smaller ones.

Ash Removal

The level of ash in the ashpan should not be allowed to build up to the level of the grate. If the level of ash becomes too high the air through the grate will become restricted causing the grate bars to overheat and preventing the fuel from burning efficiently.

Cleaning the Stove

The stove should only be cleaned when it is cold. The exterior can be dusted with a firm brush. Do not use a cloth, as this will drag on the paint finish leaving lint on the surface. From time to time it may be necessary to renovate the exterior by repainting. High temperature stove paints in aerosol form are available from your stove dealer. Do not use this form of paint until the stove is cold and always read the instructions on the container before starting to paint. The door glass is made of a special heat resisting **ceramic** and may be cleaned when cold with proprietary glass cleaning liquids and a dry cloth. (hob bright can be used also)

Shutting Down the Stove (Long Term)

The following procedure should be followed if the stove is not to be used for a long period, summertime for instance. Remove all the ashes from the grate and ash pan and use a vacuum cleaner nozzle to clean ash from the base of the stove. Close the door and open the air inlets fully. This action will allow air circulation through the stove and flue and help to avoid corrosion and condensation.

STOVE GUARANTEE

CONDITIONS OF GUARANTEE

Your **ESSE** stove is guaranteed against defects arising from faulty manufacture for one year subject to the following express conditions. Failure to comply with these conditions will invalidate the guarantee.

- Your **ESSE** dealer or a suitably qualified engineer must install the stove. Upon installation the receipt must be kept as proof of purchase.
- The guarantee is one year from date of purchase.
- The guarantee does not cover parts deemed to be replaceable in the normal usage of the stove. These parts are listed below: -
 - Wood burning Models:** - glass panels, rope seals, glass seals.
- bottom grate/plate or ashpan, firebricks, sheet iron liners, frontplate.
 - Boiler Models:** - boilers are guaranteed against weld failure. Appropriate precautions must be taken to prevent internal corrosion.

HOW TO PROCEED WITH A COMPLAINT

If you have cause for dissatisfaction with your stove, you should first contact your *ESSE* dealer who will, in turn, bring your concerns to our attention. We will assess the nature of the complaint and either send replacement parts for your dealer to fit, or nominate a regional engineer to inspect the appliance and carry out any remedial work that may be necessary. If the fault is not actually due to faulty manufacture but some other cause i.e. misuse, failure to install correctly, or failure to service at regular intervals, a charge will be made to cover the cost of the visit and any new parts required.



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