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**portway**

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S T O V E S

# **ARUNDEL BIOETHANOL STOVE**

**MODEL NUMBER PABSBLM / B-1038043**

**USE ONLY IN A WELL VENTILATED AREA WITH  
AN OPENABLE WINDOW**

**A MINIMUM ROOM VOLUME OF 45M<sup>3</sup> IS REQUIRED  
ALONG WITH BOTH A CO<sub>2</sub> ALARM AND A CARBON  
MONOXIDE ALARM.**

## **INSTALLATION, USER AND SERVICING INSTRUCTIONS**

*THESE INSTRUCTIONS MUST REMAIN WITH THE USER*

**THIS PRODUCT IS NOT SUITABLE FOR PRIMARY  
HEATING PURPOSES**

**THIS APPLIANCE IS ONLY TO BE USED WITH BIOETHANOL LIQUID  
FUEL WITH AN ALCOHOL CONTENT OF 95 TO 97.5% AND ONLY  
REFILLED IN A COLD STATE WHEN THE BURNER HAS RETURNED TO  
ROOM TEMPERATURE.**

**CARE MUST ALSO BE TAKEN TO CLEAN UP ANY FUEL SPILLAGE  
THAT MAY OCCUR DURING THE FILLING PROCESS.**

This Bioethanol stove and burner has been designed, developed and tested in Stoke-on-Trent, England to conform to **European standard EN 16647:2015** and **British standard BS 16647:2015**, certified by a recognized independent testing agency. If used in conjunction with this instruction manual this BFM Europe Bioethanol Stove is compliant with these standards.

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## **Important Note**

These Installation Instructions must be adhered to without exception. We as a manufacturer do not accept any responsibility for any accidents or injury that may occur upon misuse of this product.

## **Components List**

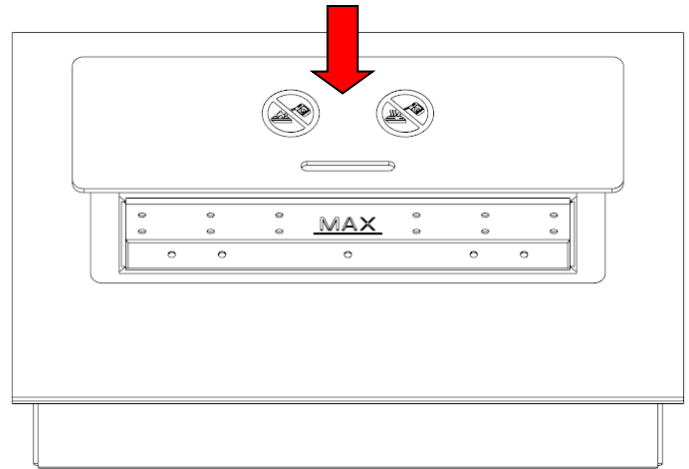
- Bioethanol stove body
- Bioethanol burner
- Burner slider tool
- Stove glove

## **APPLIANCE DATA**

<b>MODEL No.</b>	PABSBLM
<b>FUEL TYPE</b>	95% TO 97.5% ALCOHOL CONTENT BIOETHANOL LIQUID FUEL
<b>BURNER CAPACITY</b>	1.5L
<b>HEAT OUTPUT</b>	3 kW
<b>DIMENSIONS</b>	H : 583mm W : 430mm D :363mm

## Warnings before using your bioethanol stove

The following 2 safety labels are found on the slider mechanism of the bioethanol burner as shown below, 'DO NOT FILL WHEN WARM OR IN OPERATION'.



Please also observe and abide by the following warnings:



Please see page 4 for additional warnings; by purchasing this bioethanol fire, you are agreeing to exercise common sense at all times when operating the fire.

## **Important notes**

- 1 Restrict the use of this appliance to persons who read, understand and follow the warnings and instructions detailed in this instruction manual as well as the markings on the burner slider.
- 2 This appliance must be used with 95 to 97.5% alcohol content liquid bioethanol
- 3 Do not place clothes or other materials on the stove.
- 4 Do not operate the stove close to chairs and fabrics.
- 5 Do not move the stove when lit.
- 6 Do not place the stove near curtains or other combustible surfaces – see page 5 for distances from combustibles.
- 7 Always face the stove towards the centre of the room.
- 8 **It is essential that the stove is installed in a room with a functional Carbon Monoxide alarm and CO<sub>2</sub> alarm as well as an openable window.**
- 9 During operation the door should only be opened to allow for the operation of the slider mechanism, it is essential that the door is not left open.
- 10 For their protection we recommend that a fireguard, conforming to BS 8423 be fitted.
- 11 All external faces of the stove including the handle become hot during operation, therefore we advise that the heat resistant stove glove provided is used when operating the stove to prevent burns.
- 12 Some soot may form on the throat plate (the metal plate full of holes above the burn area), this can be cleaned with a cloth while the product is cold, also be sure to ensure that the burner well itself is free from any contaminants.
- 13 For decorative and domestic use only.
- 14 Ensure that children, other persons & animals are adequately supervised during the use of this product.
- 15 Never put petrol inside or near the bioethanol fire. This is extremely dangerous.
- 16 Never leave a lit fire unattended.
- 17 The fireplace is meant for use as a secondary heat source and is not suitable for cooking food or boiling water.
- 18 Do not use as a multi-burner or open fire.
- 19 Do not use any other liquid or solid combustible materials other than bioethanol fuel.
- 20 Always extinguish the fire fully before going to sleep.
- 21 Before refilling the steel fuel box with the bioethanol fuel, always ensure the fuel box has returned to room temperature (this takes approximately 30 minutes from extinguishing the fire).
- 22 Do not block any existing air vents in the room.
- 23 Do not position the fireplace where any draughts could make the flame in the fireplace behave erratically.
- 24 This bio fire and stainless steel fuel box should always be placed on a stable, flat horizontal surface and away from any combustible materials.
- 25 Always stay at least 1 metre from the bioethanol fireplace when lit due to the heat produced when lit.

- 26 Not suitable for continuous operation.
- 27 Keep children and pets a safe distance from the fireplace.
- 28 Do not allow your hair or clothes to get near the lit fireplace.
- 29 Do not blow into or fan the fire.
- 30 Do not place paper, cardboard, fabric, clothing or any other flammable materials on or around the fireplace.
- 31 Do not smoke while lighting or anywhere near the fireplace.
- 32 Do not operate if under the influence of alcohol, drugs or prescribed medication.
- 33 The stainless steel bioethanol burner supplied must be replaced if there are any signs of cracks, corrosion or misshaping. Please contact us at support at [www.bfm-europe.com](http://www.bfm-europe.com) to discuss a replacement.
- 34 Always observe local legislation.
- 35 Do not use near flammable gas.
- 36 Only use parts supplied or approved by the supplier of your bioethanol fireplace.
- 37 Do not put any ornaments or flammable items on top of the fireplace at any time
- 38 Never cover or obstruct any air slots or ventilation slots within the stove, as well as the outlet slots for the combustion products at the front and top of the stove.
- 39 Never change the construction of the bioethanol stove.
- 40 Take care not to damage, knock or scratch the safety glass. Doing so may impair on its performance or risk the glass shattering.

**Ventilation and room requirements, use only in a well-ventilated room.**

This bioethanol stove, like many others produces clean combustion products. A by-product of burning bioethanol fuel is water vapour and CO<sub>2</sub>. The room in which the heater is to be used must be provided with adequate ventilation at all times to ensure the proper circulation of air to prevent CO<sub>2</sub> buildup. The room must have an openable window at all times, which could be opened in the event that CO<sub>2</sub> levels are too high. The smallest sized room in which the appliance should be operated is **45m<sup>3</sup>** for a living room and other rooms except for basements, bathrooms and bedrooms where the appliance must not be used. In a well-insulated room with minimal ventilation, we advise that all air vents are opened if possible. **Note: Do not use the fireplace in caravans, boats, vehicles or unventilated rooms.**

**Preparing the appliance for use**

Ensure any packaging is removed and that the burner is sitting inside the stove body. It is also essential to ensure that the product is perfectly level using a spirit level, use the adjustable feet on the stove to achieve this if needed.

**Positioning your bioethanol fireplace:**

Minimum distances from combustible materials or surfaces:

**Top with cosmetic flue pipe – 600mm**

**Top without cosmetic flue pipe – 750mm**

**Sides – 350 mm**

**Rear – 150 mm**

**Front – 1000 mm**

## USERS GUIDE

### Operating the stove

**Warning: Do not leave a lit stove unattended, you must be equipped with the heat resistant stove glove, the burner slider tool and a powder fire extinguisher suitable for bioethanol. The CO<sub>2</sub> + CO alarm must also be in operation.**

#### 1 Filling the burner

**Warning: Do not attempt to refill the burner while the burner is still warm under any circumstances, wait until it is cool before refilling.**

Firstly, ensure that the burner is cool. Then proceed to pour the bioethanol into the burner well. You do not necessarily need completely fill the burner for it to work, in fact using less fuel can make the fuel last longer due to a lower maximum temperature. The maximum capacity of the burner is 1.5L as indicated by the 'MAX' fill line within the burner well.

Some bioethanol bottles are supplied with a pouring nozzle insert to allow the bioethanol to be squirted into the burner well more easily. Alternatively, a jug or funnel can be used to more easily fill the burner.



Figure A

When you pour the ethanol into the burner well, you will notice the ethanol fill to near the top of the burner well, stop filling when it reaches the brim of the burner well and simply allow the ethanol to be drained into the ceramic wool within the burner, you then repeat this process until you have added the amount of ethanol you wish to use, up to a maximum of **1.5L**. You will know it is full when the ethanol no longer absorbs into the ceramic wool and instead settles on the 'MAX' line previously described.

#### 2 Cleaning the burner

If any spillage has occurred while filling the burner, ensure that it is wiped clean with an absorbent cloth/paper towel which can be disposed of; do not use water or damp cloths to clear excess fuel because bioethanol is still flammable when diluted with water.

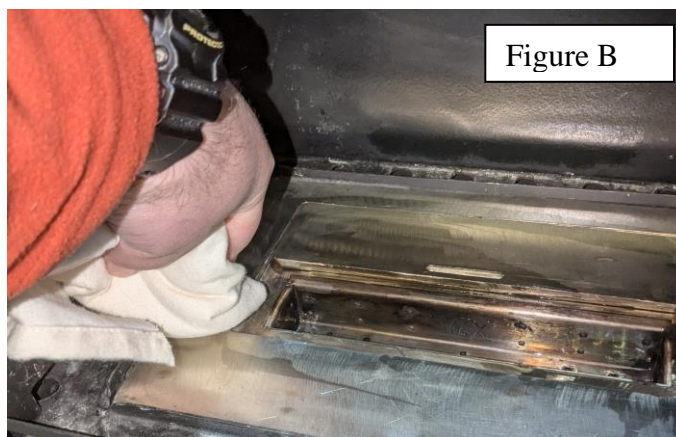


Figure B

### 3 Lighting the burner

Once you have cleaned up any potential spillage of ethanol, you can proceed to light the burner using a long reach gas lighter with your arm outstretched, simply ignite the lighter at a distance to produce a flame, then slowly offer this up to the burner well, it will then light with a soft ignition due to the burner port technology. Once the burner is lit, immediately close the door to allow the burner to heat up.

You can in fact relight the burner with the long reach lighter if it was previously extinguished by the user at some point and it still has enough residual heat.

**Caution is advised**, as the ignition will likely be more 'instant' with a larger flame, once lit, adjust the slider if desired, then immediately close the door. If the burner does not relight, it is either empty or does not have enough residual heat to reignite, in this case, you must allow the burner to cool before attempting to refill.

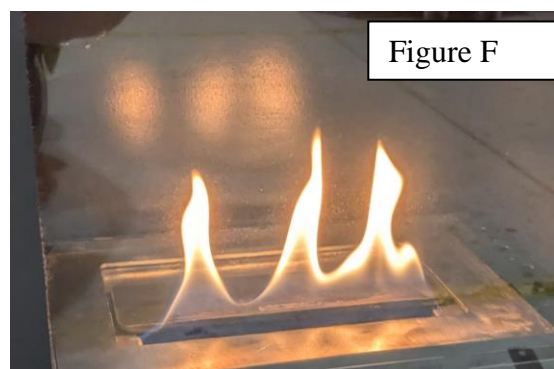
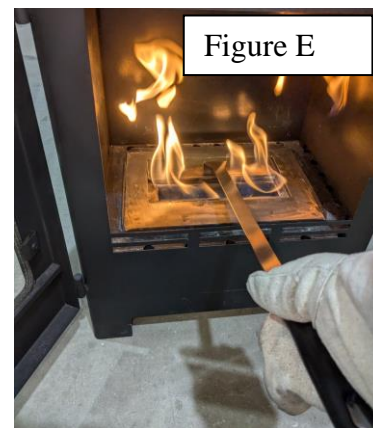
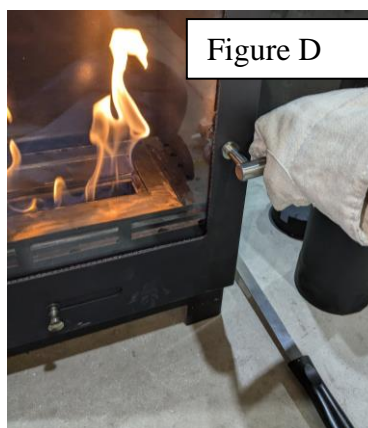
**Note:** This burner uses capillary action to function, and therefore in order to light the burner from a cold state, there must be some fuel on the surface of the burner porting, so for instance, if you had the product burning on a previous occasion, and extinguished / turned off the product for a later date, all that is required is for additional bioethanol to be poured onto the burner well, enough to cover the bottom porting burn area to achieve a 'wet' appearance before lighting.



### 4 Controlling the burn rate

When you light the burner, the burner slider mechanism will naturally be in the open position. In the open position the flame will be on the 'high' setting, which will generate a large flame which produces 3KW of heat and can run for **3-4 hours**. If you wish to turn down the burner to the 'medium' or 'low' setting, the exact size of the flame and the heat generated can be adjusted to suit your needs; ensure you wear the heat resistant glove to open the door via the handle (which opens when at a 90 degree angle) and use the slider tool provided as shown in figure D and E.

The 'low' setting on the burner is when the burner slider has an opening of approximately 10mm (see figure F), which produces a smaller more controlled flame and can burn for **8-10 hours**. We find it is best to initially run the burner at the 'High' setting for 30 minutes, then turn the burner down to 'low' to maintain a good flame, then if desired you can adjust to suit your needs.

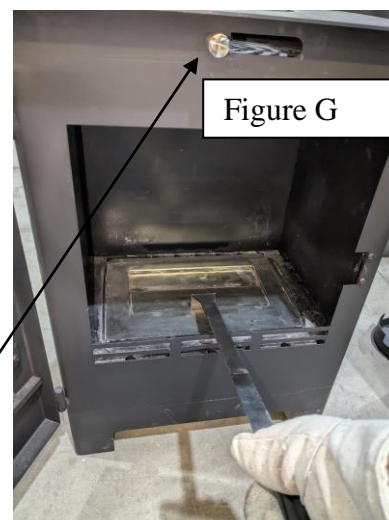


**Note:** In some cases, there can be too much heat containment within the combustion chamber while running on the 'high' setting, which can cause a larger flame with a faster burn rate. In this scenario the tips of the flame can slightly reach past the top vent on the stove, do not be alarmed, this is not a serious concern, simply slowly open the stove door while wearing the heat resistant glove provided, and reduce the burner opening using the burner slider tool. If this happens whenever the burner is on the high setting, we advise running the stove with the burner slider slightly below the 'high' setting (such as  $\frac{3}{4}$  open). A cosmetic (false) flue pipe can be purchased with this product which dampens the combustion products to significantly reduce this if it is a concern.

## 5 Extinguishing the product

When you wish to extinguish/turn off the burner, simply open the stove door using the heat proof glove via the handle (see figure D), then use the burner slider tool to move the burner slider into the 'closed/off' position (see figure G). In some cases, if the burner is particularly hot, several fast 'back and forth/open and close' motions of the burner slider will be required to extinguish the flame.

**Note: Do not touch the non-functional control levers/knobs at any time as they become very hot during operation.**



## Moving your stove

**Warning:** Do not attempt to move the stove while it is burning or even while it is still hot.

Wait until the stove is cold before moving. If the stove is to be transported by motor vehicle, the burner must not contain bioethanol.

## Cleaning and storage

Do not attempt to clean the stove unless it is cold. It should only require occasional dusting to remove any soot from the throat plate (the metal plate full of holes directly above the burner) or the burner itself. It is best that bioethanol fuel bottles are kept in a cool place out of reach of children and away from any heat sources.

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**Issue 1**

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