

# Solution (S4) Bio-Ethanol Stove User Guide



DIN EN 4734-1 : 2011 TÜV Approval

BK 778 Rev 05

ISSUE DATE : 20/11/2024

Congratulations on the purchase of your new stove!

More than 30 years of experience has been put into the development of your stove to ensure ultimate performance and years of trouble free use and enjoyment. Every detail of your stove has been carefully designed and engineered which is why we are so confident in the reliability of our products.

Your stove is built to the highest standard of craftsmanship using the best materials and the most modern equipment available. It is a highly efficient and sophisticated piece of machinery and when properly installed and operated it should provide a lifetime of heating satisfaction.

Should you have any questions about your stove which are not covered by this manual, please contact your retailer in your area or visit our website : **www.aradastoves.com**, which offers a wealth of information on how to care for and get the best from your stove.

Please ensure that you read these instructions in full and understand them before operating your stove.

Arada has a policy of continuous product development and therefore we reserve the right to amend specifications without prior notice.

Hamlet is a brand name of Arada Ltd

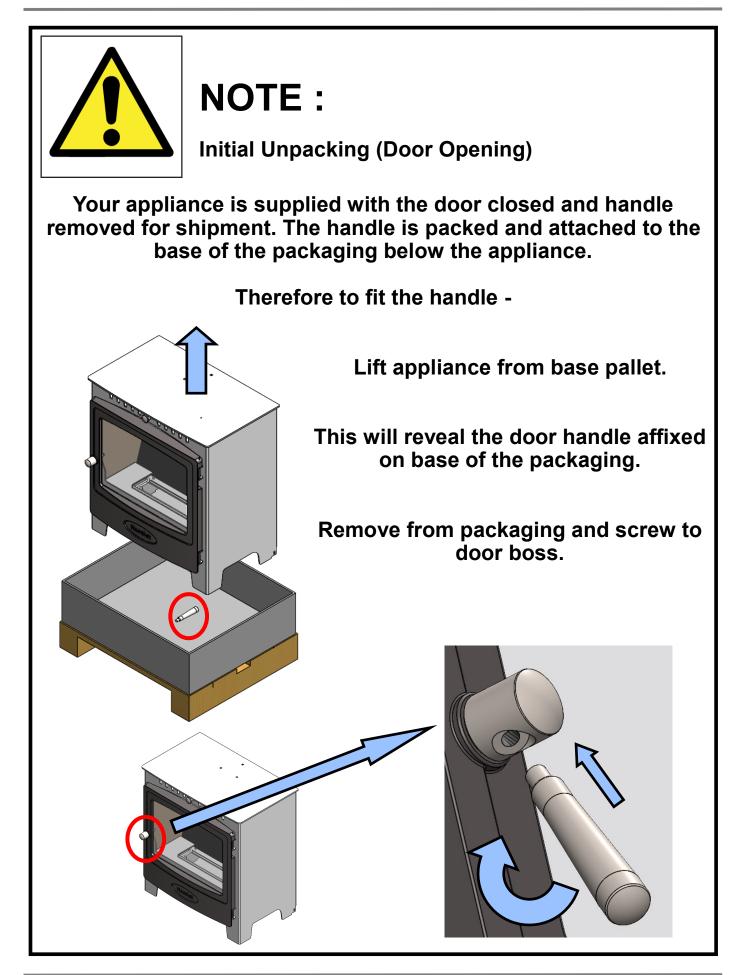
ARADA

DEVON -

HAMLET



**IMPORTANT NOTE :** The following items are packed inside the stove for shipping purposes : 2x Bolt Down Brackets & Fixings 1x Bio Ethanol Burner Complete With Operating Tool 1x Hot Glove 1x 1 litre Bio Ethanol Fuel 1x Wall Plug 1x Cable Tie 1x Eye Bolt 1x Bag Of Ember Chippings 1x Hotplate & Fixings 1x Burner Surround 2x Limit Screws NOTE : 1x Door Handle, affixed to base of packaging. Installation of the above items should be carried out by a suitably competent persons following the enclosed instructions. For reference all user and installation guides can be downloaded from the Arada website : www.aradastoves.com/support

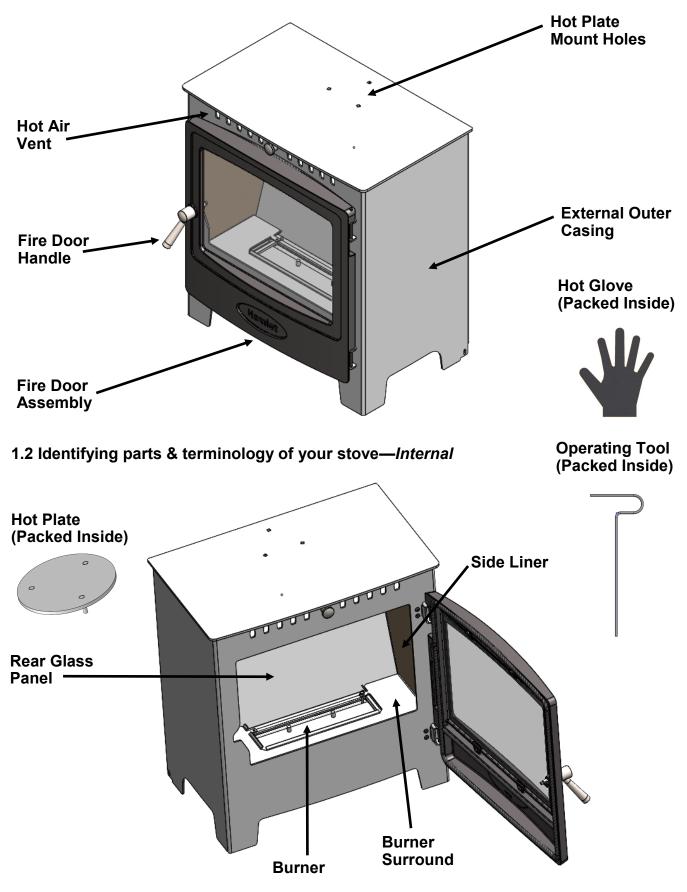


# Contents

<ol> <li>Identifying your stove</li> <li>1.1 Identifying parts &amp; terminology of your stove—External</li> <li>1.2 Identifying parts &amp; terminology of your stove—Internal</li> </ol>	5 5
<ul> <li>2. Warnings</li> <li>2.1 Important Safety Warnings</li> <li>2.2 General Safety Warning</li> <li>2.3 Warnings</li> </ul>	7
<ul> <li>3. Location &amp; Installation</li> <li>3.1 Initial Consideration</li></ul>	8 9-10 11
<ul> <li>3.4.2 Minimum Distance To Surrounding Components</li> <li>Freestanding Location</li> <li>3.5 Installation Fixings</li> <li>3.5.1 Cable Tie Method.</li> <li>3.5.2 Bolt Down Bracket</li> <li>3.6 Fitting The Hot Plate</li> <li>3.7 Burner Placement.</li> </ul>	14 15 16
<ul> <li>4. Instructions For Use</li> <li>4.1 Filling The Burner</li></ul>	21 21 22
<b>5. Technical Specification</b> 5.1 Table	23
<ul> <li>6. Guarantee</li> <li>6.1 Guarantee</li> <li>6.2 Terms &amp; Conditions</li> <li>6.3 General</li> </ul>	24
<b>7. Recycling</b> 7.1 Packaging Recycling 7.2 End Of Life Recycling	25 25
8. Notes	26-27
9. Data Label (Duplicate)	28

## 1. Identifying your stove

#### 1.1 Identifying parts & terminology of your stove—External





# 2. Warnings

2.1 Important Safety Warnings



DO NOT POUR FUEL ONTO OPEN FLAME



DO NOT MOVE APPLIANCE WHEN ALIGHT



DO NOT POUR FUEL ONTO HOT BURNER SURFACE



DO NOT PLACE APPLIANCE NEAR COMBUSTIBLE ITEMS



DO NOT IGNITE A HOT APPLIANCE



DO NOT PLACE APPLIANCE IN DRAUGHT



NEVER OVERFILL THE BURNER



KEEP PETS & CHILDREN AT A SAFE DISTANCE

#### 2.2 General Safety Warnings



**FLAMMABLE** Extreme caution should be exercised when storing and handling fuel.



**Bio-Ethanol Fuel HARMFUL. DO NOT** Ingest and wipe spills from skin.

**Bio-Ethanol Fuel** 



**DO NOT SMOKE.** When operating / filling appliance.



Keep suitable **FIRE EXTINGUISHER** near.







Bio-Ethanol Fuel Always FOLLOW manufacturers instructions

#### 2.3 Warnings

Any manufacturer's instructions must not be taken as overriding statutory requirements.

Do not use aerosol sprays or other flammable materials near the appliance when in use.

Do not use or install where water is in use; i.e. Bathrooms, Kitchens, Swimming Pools etc.

This appliance is for domestic indoor use only and not for continuous operation.

This appliance must not be used in a room with a minimum volume less than that recommended in section 3.1.

Please ensure that the air vent grills to the dwelling are not obstructed or liable to be blocked.

Caution must be exercised during operation of the appliance as both internal and external surfaces will be hot to touch. Use the hot glove provided, when the appliance is in operation.

A fireguard conforming to BS 8423:2002 should be used in the presence of children or elderly people.

Ensure no soft furnishings or combustible materials are susceptible to heat radiating from the appliance.

Ignoring the warnings could lead to damage/injury to persons and/or property.

Only use liquid Bioethanol fuel with an alcohol content of 96% or higher, **DO NOT USE GEL** fuels.

Observe the **MINIMUM** distance from surrounding objects as per diagrams on P12 or P13.

Arada Ltd will not be responsible for any consequential or incidental loss or injury however caused.

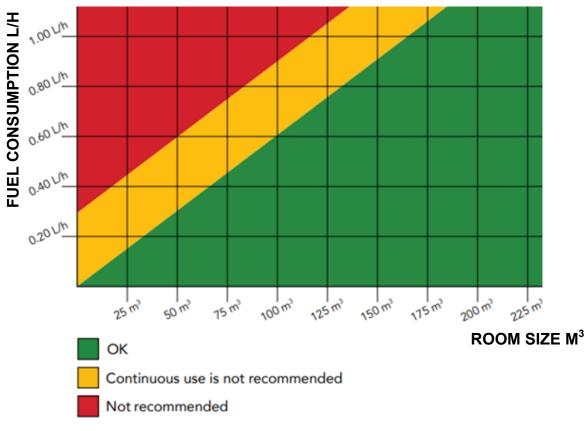
# 3. Location & Installation

#### 3.1 Initial Consideration

When burning Bio-Ethanol, water vapour and CO2 (carbon dioxide) are produced in the combustion process.

In a confined space, excessive CO2 can be harmful and therefore a minimum room size must be complied with, see table Fig.1.

The cubic room size can be calculated by measuring the Width x Length x Height



NOTE : For consumption (L/h), Please See Technical Section 5.

Fig. 1.

#### 3.2 Location

**NOTE :** These instructions are to be used in conjunction with the local building regulations in force.

- Ensure the room size or space exceeds the minimum M<sup>3</sup> cubic area.
- Please ensure that you site the appliance onto a non combustible surface.
- This non combustible surface should be horizontal and level.
- Ensure that this surface can support the weight of the appliance.
- The minimum distance to surrounding materials are observed as stated in section 3.4.
- The appliance must be used in a well ventilated space or room, but without direct draughts.
- A working CO (carbon monoxide) alarm is installed as per the manufacturers instructions.

#### 3.3 Installation—Appliance Contents

During shipment of the product, components are packed inside of the appliance. Ensure, you have unpacked the following items:

Image	Description	Quantity
	Hot Glove	1x
	Operating Tool (Packed With Burner)	1x
	Bolt Down Brackets & Fixings	1x Pair
THE PUEL	Bio-Ethanol Fuel	1x 1 Litre Bottle
	Burner (Complete With Closure Slide)	1x
	Door Handle (NOTE : Packed Affixed To Base Of Packaging)	1x

Image	Description	Quantity
	Burner Surround	1x
	M5x25 Limit Screws	2x
	Ember Chippings	1x Bag
Corri	Eye Bolt	1x
	Cable Tie	1x
A LA	Wall Plug	1x
0	5" Hot Plate & Fixings	1x

#### 3.4 Minimum Distance To Surroundings—Warning!



Always observe the **MINIMUM** dimensions, listed on page 12 or 13, failure to do so will result in the overheating of the appliance body.

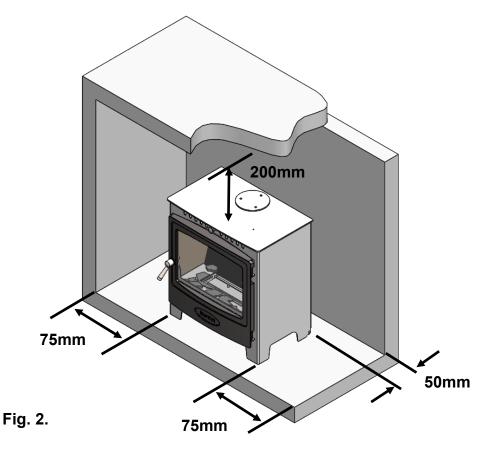
Overheating of the body will result in excessive burning with extended flames and an additional higher burn rate with high fuel consumption.

This in turn produces soot and incomplete combustion, with the potential risk of producing high levels of carbon monoxide (CO) gas, which is an extremely poisonous gas and can be fatal to human health.



Ensure that an approved (BS-EN 50291) and working Carbon Monoxide (CO) alarm is fitted to the manufacturers instructions in the same room where the appliance is being fired.

#### 3.4.1 Minimum Distance To Surrounding Components Alcove / Recess Location

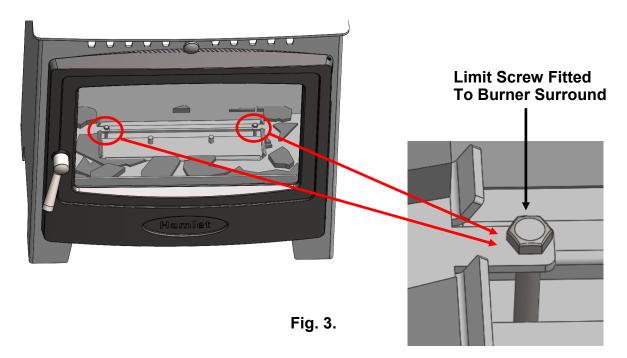




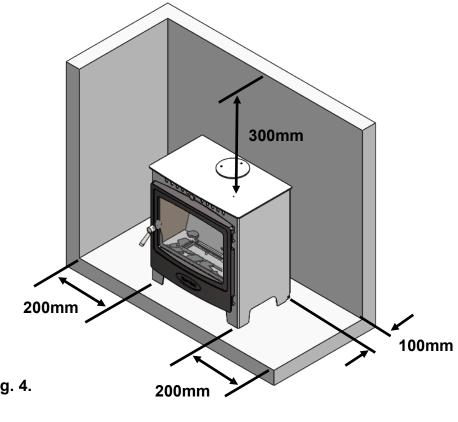
**NOTE :** The above dimensions are the **MINIMUM** requirements when locating the appliance in an alcove or recessed opening.

Together with the above minimum dimensions the 2x limit screws **MUST** be fitted to the burner surround as shown in Fig. 3.

With the limit screws fitted, the burner closure plate, partially restricts the burner opening and a reduced burn rate will operate, thus ensuring a reduced body surface temperature.



#### 3.4.2 Minimum Distance To Surrounding Components Freestanding Location



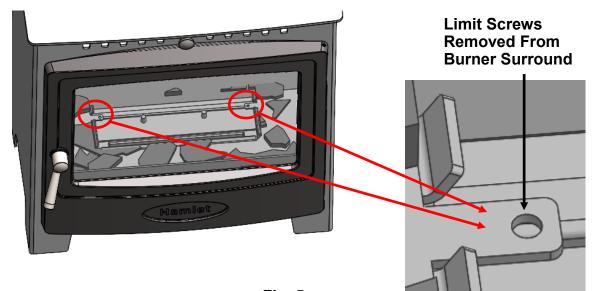




**NOTE :** The above dimensions are the **MINIMUM** requirements when the appliance is free standing from the surround furniture and soft furnishings.

If the above dimensions can be obtained, then the burner surround limit screws do not need to be fitted or can be removed.

With the limit screws removed, the burner closure plate, is unrestricted and can be fully opened leaving the full burner opening and thus achieving full burn rate and maximum body surface temperature.





#### 3.5 Installation Fixing



If excessive force is used with the door open, this can result in the appliance becoming unstable and a risk spilling flammable fuel.

Therefore the appliance **MUST** be securely fixed to either a solid wall or floor / hearth, to prevent movement and tipping during the opening and closing of the fire door, observing the minimum distances to combustible material as stated on Page 12 Or Page 13.

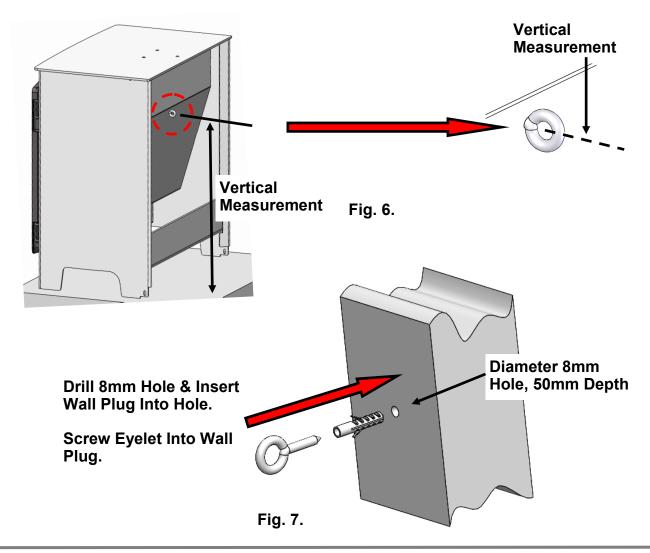
We supply two methods of fixture, depending upon requirements: -

#### 3.5.1 : Cable Tie Method

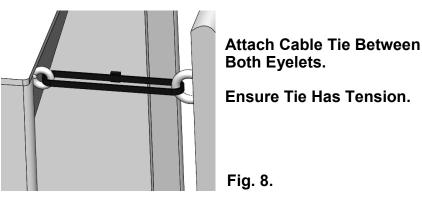
Looking at the rear of the appliance, measure from the floor surface up to the centre of the rear eyelet on the appliance (see Fig. 6.).

Mark out this measurement about the centre of the appliance onto the rear wall, drill a hole for the wall plug using an 8mm masonry drill. Insert plug and screw the eyebolt into the plug. (See Fig. 7.).

Pass the cable tie between the appliance rear eye bolt and the wall eye bolt and fasten tight (See Fig. 8.).



#### 3.5.1 : Cable Tie Method (Continued)

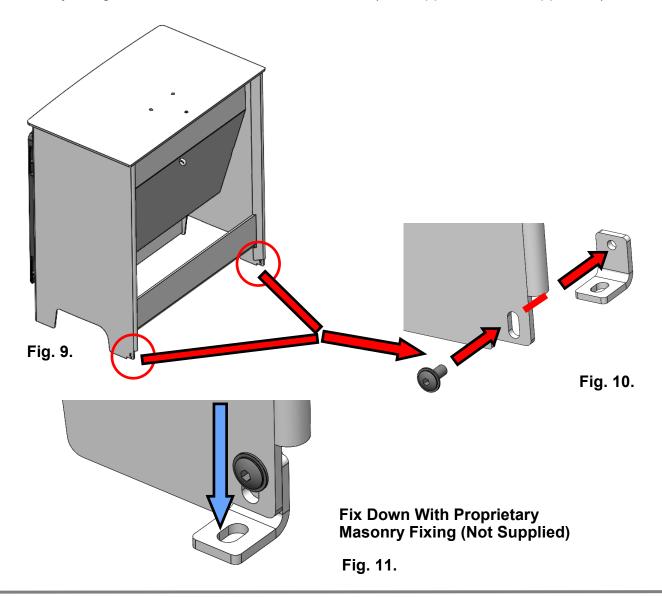


3.5.2 : Bolt Down Bracket (Alternative Fixing Method)

Looking at the rear of the appliance, position one of the right angle bolt down brackets, as shown in Fig.9, below. Fix to the side, using the M5 screw provided, see Fig. 10 & 11.

Repeat the above for the opposite side bracket.

Position the appliance and mark the bracket hole positions. Drill and affix with proprietary masonry fixings suitable for the hearth construction (Not supplied with the appliance).



#### 3.6 : Fitting The Hot Plate

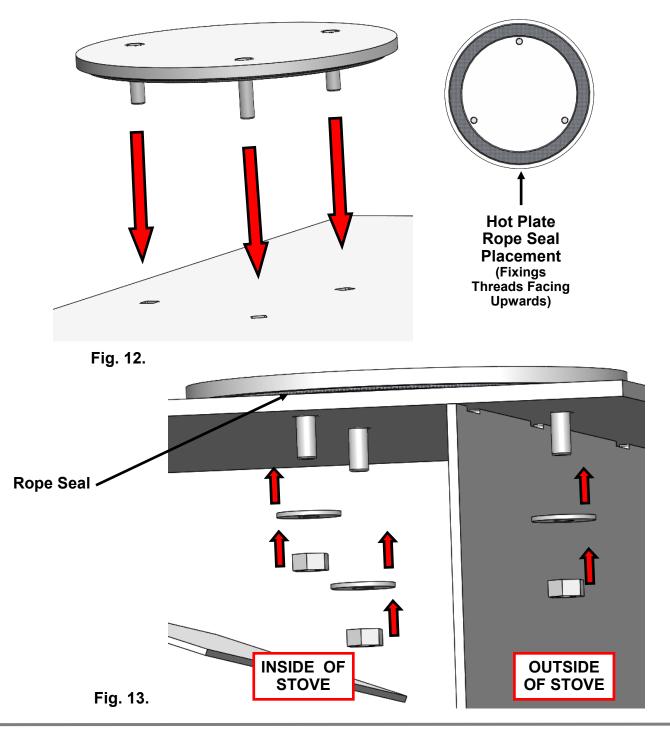
Fixing of the hot plate onto the canopy (top) of the appliance, is via the 3x square location holes cut into the top.

Affix the rope seal to the circumference of the hot plate.

Locate the hot plate studded fixings into the 3x square location holes. See Fig. 12.

Then working on the inside of the appliance, under the top, you will see the front two fixings protruding downwards. Fit 1x nut and 1x washer to each fixings and tighten.

Then working on the outside of the appliance, at the rear, you will see the rear studded fixing protruding from the top. Fix the remaining nut and washer supplied, tighten with a 10mm spanner or socket. See Fig. 13.



#### 3.7 Burner Placement

#### NOTE :

Before continuing the next steps, please ensure that you have removed all the internally packed items (as listed on contents pages 9 & 10) from the inside of the appliance.

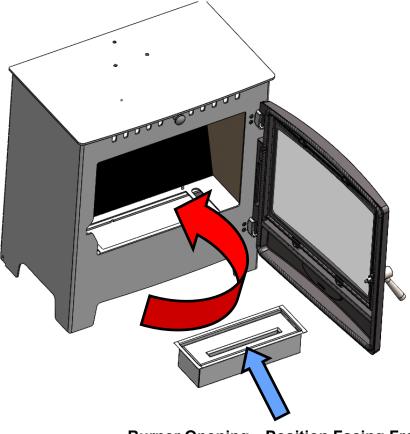
#### Step 1.

Remove the burner assembly from the packaging.

Separate the operating tool and top closure plate from the burner assembly. Keep for use later.

Open the fire door to the stove and locate the burner assembly into the rectangular opening.

Please ensure the rectangular burner opening is towards the **FRONT** of the appliance. See Fig.14.



Burner Opening—Position Facing Front Of Stove

Fig. 14.



### WARNING !

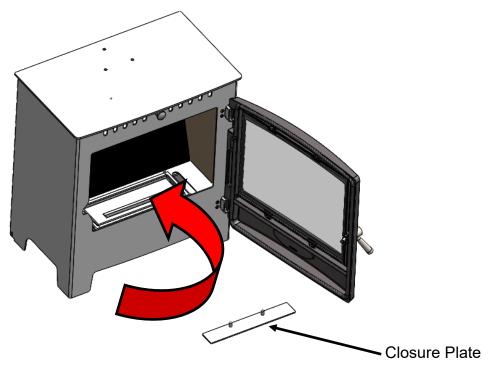
PLEASE ENSURE THAT THE BURNER OPENING IS FACING THE FRONT OF THE APPLIANCE.

UNDER NO CURCUMSTANCES SHOULD THE BURNER BE PLACED OTHER THAN SPECIFIED ABOVE.

#### 3.7 Burner Placement Continued.

#### Step 2.

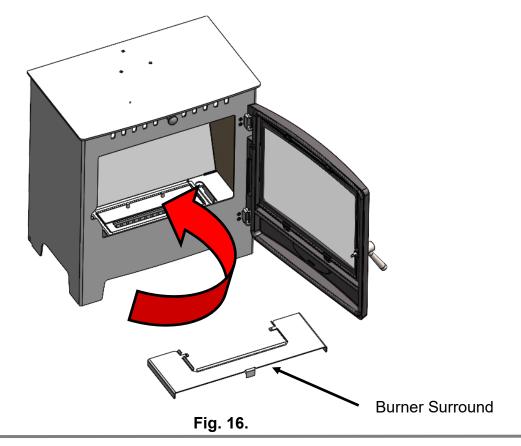
Place the top closure plate on to the burner assembly. See Fig. 15. Please NOTE : Closure plate round pins nearest to rear.





#### Step 3.

Take the burner surround and place inside the firebox, as shown in Fig. 16.



#### 3.7 Burner Placement Continued.

#### Step 4.

Take the bag of ember pieces and place on top of the burner surround. See Fig 17. There is no set pattern as these pieces are of random shapes.

PLEASE NOTE : You do not need to use all the ember chips as surplus is supplied.

**DO NOT** place ember pieces over or into the burner opening as this create high levels of soot and lead to high levels of carbon monoxide which can be fatal.



Fig. 17.



# WARNING !

DO NOT PLACE EMBER PIECES INTO OR OVER THE BURNER OPENING. KEEP EMBER PIECES WITHIN THE BURNER SURROUND.

UNDER NO CURCUMSTANCES SHOULD THE EMBER PIECES BE PLACED OTHER THAN SPECIFIED ABOVE.

# 4. Instruction For Use

#### 4.1 Filling The Burner

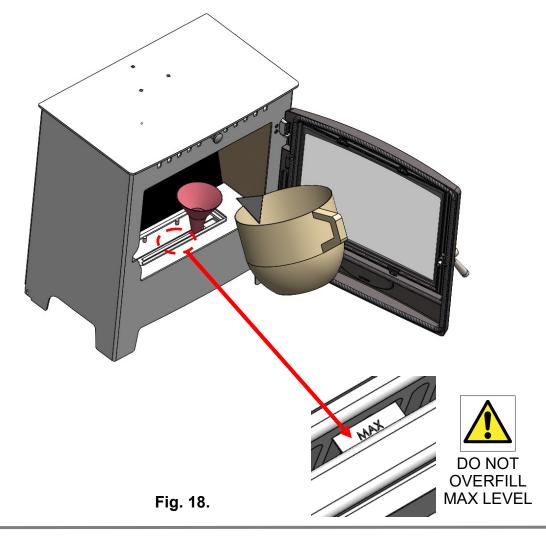
- Make sure the burner is completely extinguished and cooled down before filling.
- Ensure that the closure plate is pushed fully toward the back of the burner.
- To avoid spillages, we recommend using a funnel and decanting the Bio-Ethanol fuel into a measuring jug, placing the funnel down into the burner opening.
- Carefully and gradually add the Bio-ethanol fuel, using the measuring jug.
- Any spilt fuel should be mopped up with a paper towel and disposed of.
- Stop filling as soon as the Bio-ethanol fuel level reaches the MAX level within the burner opening. See Fig. 18.

**NOTE :** For initial use, we recommend only adding fuel, starting at 250ml or 500ml and gauging the unit burn time.



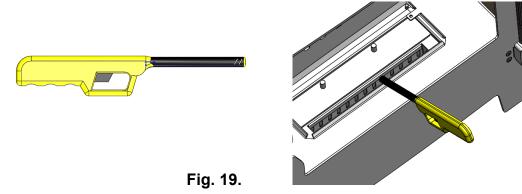
# WARNING!

- **DO NOT EXCEED THE MAX LEVEL** any surplus fuel must be removed, before ignition.
- DO NOT REFUEL INTO A LIT BURNER.
- DO NOT FILL ONTO A HOT BURNER. ALLOW 30 MINUTES AFTER FLAMES
- HAVE BEEN EXTINGUISHED, BEFORE ATTEMPTING TO REFUEL.
- DO NOT SMOKE WHEN HANDLING OR USING BIO-ETHANOL FUEL.



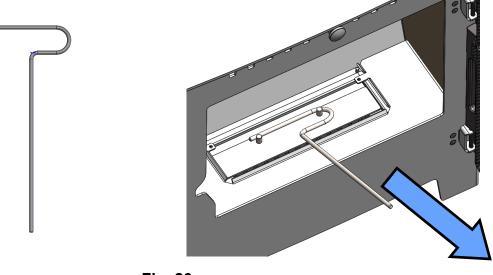
#### 4.2 Lighting The Burner

- Ensure that the closure plate is pushed fully toward the back of the burner.
- Using a long match or we recommend a long reach gas lighter, ignite the burner. See Fig. 19.
- Wait for minimum of 30 seconds before gradually closing the door, to prevent blowing or fanning the flames.
- Initially there may be some condensation forming on the door glass, this is normal and will evaporate away once the appliance is up to working temperature (approx. >1 hr).
- If the flames have extinguished and condensation is present, carefully remove this to prevent staining or corrosion forming.
- You can regulate the burn or flame height by partially closing the closure plate, using the hooked end of the operating tool. Partially sliding the closure plate over the burner will reduce the burn rate and therefore reduce fuel consumption and increase total burning run time, we recommend attempting this after 30 minutes of lighting.



#### 4.3 Extinguishing The Burner

- Take the hook end of the operating tool and engage onto the two pins of the closure plate. See Fig. 20.
- Slide the plate forward over the burner rectangular opening.
- If the burner does not extinguish, when the closure is pulled over the flame, re-open the plate and repeat the process by pulling the closure plate back and forth a few times, in a quick motion.





#### 4.4 During Operation

- During operation, an odour may occur from the combustion process of burning the Bio-Ethanol fuel, this is normal. Simply ventilate the room, by slightly opening a window or door, taking care not to prevent a draught to the burner.
- Alternatively, a scented wax melt proprietary candle can be used to mask the smell.
- Care must be taken when opening and closing the fire door as any surrounding surfaces will be <u>VERY HOT</u>. See Fig. 21.

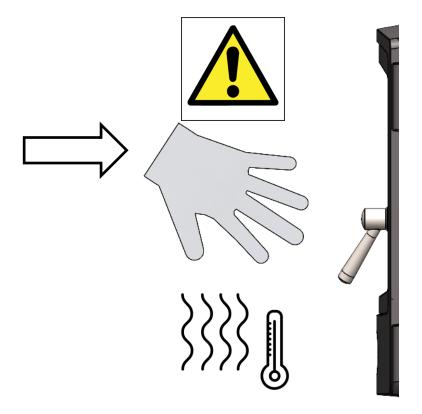




Fig. 21

ALWAYS USE THE STOVE HOT GLOVE WHEN USING THE FIRE DOOR HANDLE RISK OF PERSONAL INJURY MAY OCCUR.



#### DO NOT LEAVE THE APPLIANCE UNATTENDED WHEN LIT

#### 4.5 Partial Burn

If the burner has been extinguished with fuel left inside the chamber, then keep the closure plate over the burner opening.

However, as the closure plate is not air tight, over a period of time, the bio-ethanol fuel will evaporate into the atmosphere.

The next time the burner is to be lit, check the fuel content and add accordingly.

# **5. Technical Specification**

SPECIFICATION	Solution 5 Bio-Ethanol	Solution 5 Widescreen Bio-Ethanol
Height (Inc. Hot Plate)	558 mm	558 mm
Width (Inc. Floor Fixings)	440 mm	525 mm
<b>Depth</b> (Inc. Door Handle)	385 mm	382 mm
Weight (Nett)	40 Kg	46 Kg
Burner Capacity (Max Inc. Overfill 1 Litre)	0.8 litre	0.8 litre
Burn Rate (Max)	0.35 L/h	0.31 L/h
Nominal Heat Output To Room	2.46kW	2.46kW
Typical Run Time	2— 4.5 Hours Approx.	2.5 — 4.5 Hours Approx.

## 6. Guarantee

When you buy a Hamlet stove, you are not only buying a first class appliance, you are receiving a commitment from us to look after you and your appliance.

Please note, Hamlet is a brand name, belonging to Arada Ltd.

#### 6.1 Guarantee

If any part of the main body of the stove fails due to a manufacturing or material defect during the guarantee period that applies in respect of the relevant stove (as set out below), Arada will, at its sole discretion, repair or replace your Hamlet stove, for no charge.

For the purposes of this guarantee, a material or manufacturing defect includes the splitting or cracking of the main body (defined as the steel outer casing and items fixed immovably to the casing).

Damage caused by over-firing or over-heating is not covered as described in the operation manual. Body paint which has turned dusty white is also indicative of such use.

The following guarantee periods shall apply in respect of the following Hamlet stoves: All Solution (S4) Bio-Ethanol stoves come with a **TEN** year warranty to the main body of the stove.

The external paint finish and all remaining components carry a **ONE** year guarantee only.

This guarantee is subject to the Terms and Conditions set out in section 6.2.

#### 6.2 Terms and Conditions

The following terms and conditions must be satisfied in order for your stove to be covered by the guarantee set out in section 6.1:

1. Your stove must have been purchased from an officially approved Arada dealer.

2. You must be the original purchaser of the stove in order to make a claim. This guarantee is not valid in relation to any claims made by someone who did not originally purchase the stove from Arada or an approved Arada dealer.

3. Any claim under this guarantee must be made through the approved Arada dealer where the stove was purchased and accompanied by proof of purchase (e.g. a valid receipt). Stoves not purchased from an approved Arada dealer will not be covered by this guarantee.

4. Your stove must be installed in the UK for this guarantee to be valid. Stoves installed outside of the UK will not be covered by this guarantee.

5. Any claims under this guarantee shall not be valid where the installation of the stove does not conform to all required Building Regulations and other legislation in force at the time of purchase, and where flue draw readings have not been made to confirm a suitability of the flue. The manufacturer's decision as to whether this condition has been satisfied shall be final.

6. The guarantee does not cover damage caused to the stove through careless handling or misuse or neglect of the appliance (misuse and neglect being not following the manufacturer's instructions and user guides in relation to the stoves, including the use of non-recommended fuels).

7. Consumable service items are not covered by this guarantee.

8. The guarantee does not cover damage caused by storing or using the stove in a damp environment, defects or faults caused by local conditions such as draught problems.

9. The guarantee is only valid if the stove is serviced and checked annually by a suitably qualified heating engineer, with documentation to be retained and produced in the event of a claim being made.

10. The guarantee is only valid where any spare parts used are supplied by Arada or an approved Arada dealer. The use of spares other than those supplied by Arada Limited shall invalidate the guarantee. Parts can be purchased through an approved dealer or directly from Arada, online at www.aradastoveandspares.com.

11. The guarantee is not valid where any repairs or modifications have been made to the stove which have been carried out by anyone other than Arada or its authorised representatives or approved dealers.

12. All guarantee periods commence on the date of purchase and are non-transferable and solely for the benefit of the original purchaser of the stove.

#### 6.3 General

Our guarantee is offered as an addition to your statutory rights and will not affect your statutory rights. You can obtain information about your legal rights from a Trading Standards office's or a Citizens' Advice Bureau.

# 7. Recycling

# recycle

#### 7.1 Packaging recycling

The majority of the packaging components can be recycled, by the material components:

- WOOD (Pallet) Household quantities of wood can be taken to your local <u>Household</u>
   Waste Recycling Centre.
- CARDBOARD (Outer packaging) Most local councils will collect cardboard as part of their kerbside collection; Otherwise, cardboard can be recycled at your local <u>Household Waste Recycling Centre</u>.
- PLASTIC (Internal Bubble Packing / Bags / Outer Strapping) Some district councils collect plastic packaging in their kerbside collections; Alternatively, most major supermarkets have plastic bag collections. The outer strapping should be taken to your local Household Waste Recycling Centre.



#### 7.2 End of life product recycling

Again like the packaging the majority of the appliance components can be recycled, by the material components:

- CAST IRON & STEEL All metal components can be recycled at your local Household Waste Recycling Centre.
- GLASS Most local councils will collect glass as part of their household kerbside collection; Otherwise, glass can be recycled at your local <u>Household Waste</u> <u>Recycling Centre</u>.
- FIREBOX LINERS & GASKETS/SEALS These components are currently not recyclable and should be disposed of at your <u>Household Waste Recycling Centre</u>.

Your local Household Waste Recycling Centre can be located—

#### https://www.recyclenow.com/local-recycling?

# 8. Notes

# 8. Notes continued





HAMLET Hamlet is a brand name of Arada Ltd

ARADA

### Arada Ltd

The Fireworks, Weycroft Avenue, Axminster, Devon EX13 5HU United Kingdom

www.aradastoves.com T: +44 (0)1297 632 050

www.aradastovesandspares.com T: +44 (0)1297 632 052

