



Ecoboiler Stove

User Guide

PLEASE RETAIN THIS GUIDE FOR FUTURE REFERENCE

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BS EN 13229:2001 +A1:2003+A:2004 CE

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Arada Ecoboiler Stove User Guide

Congratulations on the purchase of your new Arada 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 Arada 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 the Arada retailer in your area, call our technical support department on +44 (0)1297 632052 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. Due to printing cycles, items or options may be described before they are generally available or after they have ceased. Please check with your retailer or dealer if you are unsure about any aspect of your stove, its installation or correct use.

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IMPORTANT INFORMATION

1 Warnings

- It is a **LEGAL REQUIREMENT** that the installation of all new or replacement, wood or solid fuel heating appliances, obtain Building Control approval from your local Authority or the installation work must be carried out through a government approved Competent Persons Scheme.
A list of all Competent Person Schemes can be found at:
[www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-
authorised](http://www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-authorised)
- Any manufacturer's instructions must not be taken as overriding statutory requirements.
- Please Note: Classification of these appliances is for intermittent use only.
- Do not use aerosol sprays or any other flammable materials near the appliance when in use.
- Do not use the appliance as an incinerator.
- Use only recommended fuels. **STRICTLY NO** unsuitable and non recommended fuels or materials or liquid fuels allowed. Pure petroleum coke or Bituminous house coal must **NOT** be burned in this appliance. The use of these fuels will invalidate the appliance guarantee.
- Please ensure that air inlet 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 stove mitten 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.
- Always observe the distances to combustible materials as stated on the appliance Data Plate and in the Technical Data section of this manual. Ensure no soft furnishings or combustible materials are susceptible to heat radiating from the appliance.
- Under **NO** circumstances should the stove be operated for extended periods with the main fire door open. This will result in an over firing situation and will lead to severe damage to the stove and flue system. Ignoring the warnings could lead to damage/injury to persons and/or property.
- Arada Ltd will not be responsible for any consequential or incidental loss or injury however caused.

2 Recommended fuels

2.1 Wood

As a natural and renewable fuel, wood is the first choice for burning, however burning wood requires a little effort and planning.

Any type of wood is suitable (though hardwood is preferable) provided it is well seasoned and has a moisture content below 20%. This usually implies that the timber has been suitably stored to allow moisture to evaporate for at least 9 months in the case of soft wood, and at least 24 months in the case of hard wood. We recommend using dry logs with a diameter of 5-8cms and length of 20-25cms.

If, when burning wood, you see signs of sticky tar inside the appliance or chimney, your wood is 'green' or too wet and requires further seasoning. An electronic moisture meter can be obtained in order to determine the moisture content of your wood fuel.

Wet wood must not be used as this will greatly contribute to the creation of tar and creosote which may, in extreme cases, run down the chimney in liquid form. This will seriously damage both the chimney and the appliance and increase the risk of a chimney fire.

DO NOT BURN Bituminous house coal or petroleum coke in this appliance.

DO NOT BURN any form of plastics in this appliance.

2.2 Solid fuel

If you have chosen a multi/solid fuel stove this will have a cast iron riddling grate which allows you to burn a wider variety of fuel types. It is important to ensure that your fuel is intended for use in a stove, modern stoves are designed for use with current cleaner burning and smokeless fuels.

Arada recommends the use of approved smokeless fuels which have been deemed suitable for use on closed appliances including multi fuel stoves. For additional advice on fuels, please refer to The Solid Fuel Association.

3 Before using your stove

Arada stoves are designed to be operated with the fire door closed at all times, apart from refuelling (when alight) or cleaning (when cold). Never leave the appliance unattended for an extended length of time with the door open.

Prior to lighting the stove for the first time, please check with the installer that:

- Installation and all building work is complete. (Refer to the installation guide.)
- The chimney is sound, has been swept and is free from obstruction.
- Building Regulations and any local by-laws have been followed during installation.
- All firebox liner panels and throat plate are in place.
- The chimney draw has been checked and is within specification (between 0.1mb to 0.2mb, or 10-20 pascals). This ensures your stove will operate predictably and efficiently.
- A Carbon Monoxide detector is correctly installed in the same room as the appliance.
- Suitable provision for combustion and ventilation air, depending upon Building Regulations have been undertaken by the installation fitter.
- Consideration must be given for the need for extra ventilation if another heating source needing air is to be operated simultaneously. If an extraction fan is proposed to be fitted to a connecting area of the house, after the stove has been installed, professional advice should be sought from a qualified engineer.
- Always wear suitable protective fire gloves when refuelling your stove, such as the Arada hot glove supplied with your stove. Always keep the hot glove away from naked flames and sparks when re-fuelling the appliance.
- We recommend that you light a small fire for the first few days of use to cure the paint and allow the castings to relax.
- You may hear your stove produce clicking or ticking noises whilst it heats up or cools down. This is completely normal and is produced by the expansion and contraction of the steel components in your stove when its temperature changes.

Ensure that you have read and understood these instructions before lighting the fire

4 Air inlet Controls

Your stove has three air inlet controls (or two if you have an Ecoboiler 12 Wood model - these stoves do not feature an 'Easy Boost' inlet). These are located either on the stove body or the door.

The primary air inlet provides under draught to the base of the fire chamber, the airwash system (secondary air) providing overdraught, and (where fitted) the 'Easy Boost' provides an on demand increase in air for combustion. The exact controls may differ from those illustrated in this manual but will work in the same way.

4.1 Primary Air

The primary air is supplied through the thermostatically controlled air inlet beneath an access cover on left side of your stove. This should have been calibrated when the stove was installed. (See accompanying installation guide). It regulates the amount of under draught air entering the stove depending on the setting of the control knob.

The control knob is numbered 0 to 5 relating to the nominal temperature of the water within the boiler jacket. In a correctly-calibrated installation the water in the boiler jacket should not exceed 80°C when the knob is set to 5.

If a lower radiator temperature is required a lower number should be selected. Some experimentation may be necessary to find the setting best suited to your preferences/ environment.



Figure 1: Setting the thermostat

4.1.1 Airwash system / secondary air

The airwash control is located above the fire door. Sliding the control knob to the right as far as it will go, fully opens the airwash. Sliding the control knob completely to the left closes the airwash

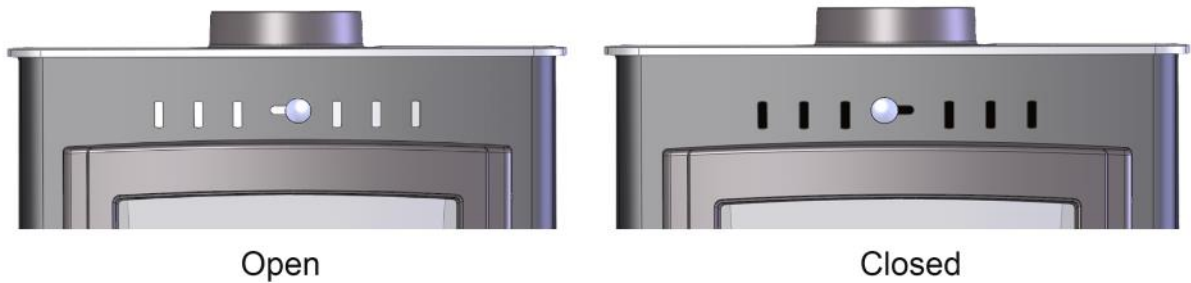


Figure 2: Airwash / secondary air controls

4.1.2 Easy Boost (Not applicable to Ecoboiler Wood 12 (EBW12))

The Easy Boost slider allows a boost of air into the stove to assist whilst lighting the fire. Once lit the Easy Boost inlet should be used for a temporary increase in boiler output when required. It should be used for short periods only and will temporarily override the thermostatic control.

Sliding the control towards the "+" symbol will increase the volume of under draught to the grate. Moving the control towards the "-" symbol reduces the volume of under draught.

Always close the Easy Boost slider if the stove is to be left unattended. This is to allow the stove's automatic thermostatic control to function correctly - a crucial requirement to help prevent the water from boiling



Figure 3 Easy Boost air control

5 Lighting your stove

5.1 Burning wood

When wood is burnt, it is in fact the volatile gases released from the wood that burn and this requires a good supply of air coming from above the fuel. For this reason we open the air inlet fully while igniting the stove then reduce this once the burn is well formed. As much as 40% of the heat from burning wood is obtained from secondary combustion and this can be severely hampered by air entering the fire box from below the fuel.

1. Set the fire by placing several layers of dry kindling wood into a criss-cross grid pattern on top of the grate. The use of two or three fire lighters may assist in lighting the kindling.
2. Fully open the airwash and Easy Boost air control and light the fire-lighters and/or kindling wood.
3. After the kindling has caught alight, you should almost close the fire door leaving it ajar by about 10mm. This will aid flue draw during the initial lighting of the fire.
4. The flue temperature and draw should be established after five minutes and the kindling reduced to form an ember bed.
5. Carefully load the stove with well seasoned wood and fully close the fire door.
6. After ten minutes, fully close the Easy Boost air control and regulate the airwash control to a setting which maintains clear glass, typically by reducing the control to approximately half open.

5.2 Burning solid fuel

Please do not attempt to burn Pure Petroleum coke or Bituminous house coal in your stove. The use of these fuels could damage your stove and will void your warranty.

Solid fuel burns best with its air supply for combustion coming from beneath the fuel.

1. Set the airwash / secondary air slider to about one quarter open and the primary air slider fully open (see section on Air inlet controls).
2. Build the initial fire by creating flue draw as with wood fuel (see steps 1, 2, and 3 of section 'Burning Wood'), with kindling and fire lighters.
3. Once flue draw has been established, carefully load the stove with fuel and close the door.
4. When the fire is well alight close the Easy Boost slider.
5. The airwash should be opened sufficiently to keep the door glass clean.

Whilst burning solid fuel it can be beneficial to occasionally riddle the grate bars so any burnt fuel will fall between the grate bars into the ash pan below. This will ensure a good under draught is maintained. Whilst using supplied safety glove,, this should be done by rocking the supplied operating tool on the external riddle control as per figure 4..



Figure 4 Use the operating tool on the riddle control

5.3 Warning— Fume / smoke emissions

Properly installed with a suitable flue or chimney, operated and maintained correctly, this appliance will not emit fumes into the dwelling. Occasional fumes when de-ashing and refuelling may occur. However, persistent fume emission is potentially dangerous and must be investigated by an approved / registered installer. **STOP USING THE APPLIANCE IF YOU SMELL FUMES OR SEE SMOKE ESCAPING**

If fume emission does persist, the following immediate actions should be taken:

- Open doors and windows to ventilate the room
- Let the fire die or extinguish and safely dispose of fuel from the appliance
- Check for flue or chimney blockage, and clean if required.
- Seek expert advice from your registered installer
- Do not attempt to re-light the stove until the cause of the fume emission has been identified and corrected.

5.3.1 Refuelling on to a low fire bed

If there is insufficient burning material in the fire bed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling for ignition to prevent excessive smoke.

6 Further information for all stove owners

6.1 Reduced burning (Slow Combustion)

When wood is burnt slowly in a closed appliance (e.g.: air controls at the minimum setting), it produces moisture and tar which will create condensation and deposits in the chimney. This effect can be minimised by burning hard for a short period, fifteen to twenty minutes twice a day.

To avoid chimney problems, your appliance should not be burnt at a reduced burn rate without a period of fast burning. Fast burning is when the stove is burnt with a 'lively flame' and a higher temperature. We strongly advise against stoking the fire with wood and reducing the air inlets before leaving the stove to extinguish (perhaps when retiring to bed) as this can lead to a cooling of the stove and flue, resulting in incomplete combustion, sooty deposits and high levels of pollutant gases released into the environment.

6.2 Over firing

DO NOT over fire your appliance. Firing the stove at maximum for prolonged periods may result in over-firing. If the chimney connector or casing glows red the appliance is being over-fired and this may result in a chimney fire. Other signs include warping and a red-oxide colouring will demonstrate the over heating of internal parts; body paint which has turned dusty white is also indicative of such use.

6.3 Chimney fires

Used in the correct manner, with the correct fuel and regular maintenance a chimney fire should never occur. However in the event of a chimney fire, the following procedure should be actioned without delay: **Call the fire service—DIAL 999**

Immediately close all of the air inlet supplies on the appliance to reduce the air supply to the stove.

Move items of furniture and combustibles away from the surrounding area of the stove, to reduce the risk of fire and allow access for the fire service. Ensure access to the loft space is available.

Evacuate the property.

6.4 Periods of non-use (summer months)

Please ensure that your stove is left clean and moving components are well lubricated with a water repelling corrosion inhibitor for the summer months (during periods of prolonged non-use). If possible store the throat plate outside the stove. Check all moveable components at regular intervals to ensure they are moving freely. Allow air movement through the stove by opening the air inlet control to about half way, open or leave the door ajar. This will allow a free flow of air through the appliance thus preventing moisture and condensation forming inside the stove and chimney. This preventative maintenance will ensure your stove stays in the best condition for the coming winter months.

6.5 Ash removal

The ash pan should be emptied when the level of ash reaches the top of the ash pan. On no account should the ash be allowed to build up to touch the underside of the grate bars, as this will greatly reduce the lifespan of the grate.

To remove ash use the supplied operating tool::

- You should ALWAYS USE the supplied glove and operating tool.
- Open the door of the stove, pausing briefly when ajar so as to allow the fire to adjust to the increased air supply
- Put the fork end of the operating tool into the slots of the ash pan
- Carefully remove the ash pan from the ash pit chamber.
- Empty the ash into a suitable container and replace the ash pan into the stove, withdraw the operating tool and close the fire door.

Warning: The ash can be very hot. Care must be taken not to burn hands or household objects with falling embers. Empty only into a metal container. Even if ash appears cold, red-hot embers may be concealed and could easily start a fire or cause injury.

6.6 Multi fuel grate (except Ecoboiler Wood)

The grate in your Ecoboiler stove comprises of a series of reciprocating cast iron bars seated on a pivoted comb. These should come pre-assembled in your new stove.

All bars in the grate are identical, but every other bar is turned 180 degrees with the ends of the bars marked "H" sitting on the high sections of the comb, and the ends marked "L" sitting on the low sections.

The riddling lever, either on the side or front of your stove, can be operated with the stove operating tool to riddle ash into the ash pan below. Only riddle the stove with the door closed unless your stove requires you to open the door to access the riddling mechanism. Stop riddling once red embers begin to fall into the ash pan.

After extended use it may be necessary to replace some of the grate bars. Periodic inspection of the bars is recommended and any damaged bars should be replaced. Also check for obstructions that may prevent the operation of the riddling mechanism.

7 How heat is delivered by your stove

7.1 Radiant heat



All Arada stoves radiate heat into the room. The radiated heat is most intense at the front of the stove, especially through the door glass and less intense the further you move away from the stove.

This radiated heat is delivered as infrared rays heat the objects they strike. It is then these objects (such as the chimney breast, hearth, etc.) which heat the surrounding air in the room.

7.2 Hot Water

Your stove also has a boiler jacket integrated into the rear of the stove. This is used to heat water which can be used to heat your domestic hot water supply. Depending on the configuration of your installation your Ecoboiler stove is capable of heating radiators, underfloor heating and a hot water tank.

Please speak to your installer who will be able to explain how your stove has been connected and give some advice on how to best utilise its heat output.

8 Care for your Ecoboiler stove

The following items should be checked on your stove at regular intervals to help ensure that the safe and efficient use of your stove continues for many years to come. This should only be done when the stove is unlit and cold.

8.1 Adjusting the door hinges

Once the appliance has been under fire for a period of time the fire door may appear to have moved out of alignment with relation to the door aperture or catch. This is quite normal and due to the settling of the casting. Doors attached with two hinges fixed to the body with screws can be re-aligned as follows:

1. When the appliance is cold, open the fire door so that it is at right angles to the front of the stove and then lift the fire door up off of its hinges.
2. Gently tap the hinge pins to compensate for the misalignment and then re-fit the door and check to ensure it now sits square to the body; if not repeat the previous step.

If the fire door needs to be raised, please follow the instructions below:

1. When the appliance is cold, open the fire door so that it is at right angles to the front of the stove and lift the fire door up of the hinges.
2. Drop one washer on the top and bottom hinge pins. Fit the door and check. Repeat again if necessary.

8.2 Fire door seal

The rope seal around the edges of the main fire door should also be checked. Look for signs of fraying, peeling away or the ends not meeting. If the rope is unable to create a good seal with the stove body it should be replaced. A poor seal will decrease your ability to control the burn rate and its efficiency whilst leading to an increase in heat lost through the flue.

8.3 Cracked glass

It is not recommended to operate the stove with cracked glass; this can lead to over firing due to air leaking into the firebox and it may fail completely leading to personal injury or a fire. You should discontinue use of your stove until it has been repaired. You can source replacement glass kits from www.aradastovesandspares.com.

8.4 FEDs Inspection (where fitted, does not apply to EB25HE)

The Flue Exhaust Diversion (FEDS) system needs to be checked regularly to ensure any build up of ash and other debris is removed. The Installation Guide contains details on how to remove and inspect the outer FEDS plate. This should be done only when the stove is unlit and cold.

8.5 Thermostat Maintenance

It is possible that over time, especially if ash is not removed regularly, the primary air inlet and its damper flap may become restricted / blocked by ash which may compromise the correct operation of the thermostat. The installation guide contains details on how to maintain the operation of the damper flap and thermostat housing.

9 Further resources / reading

Once again we would like to thank you for buying your Arada stove. We appreciate that we have given you a lot of information to read, but we hope it has been clear and helpful and that you are now able to enjoy the full benefits of your stove.

However if you have any queries, doubts or would like further advice please do not hesitate to speak to your Arada dealer or call us. You will find our contact details below, as well as a list of resources where you can discover more information about your stove and associated articles.

- Arada Technical Support
01297 632052 / technical@aradastoves.com / www.aradastoves.com/support
- Competent Person Schemes
<https://www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-authorised>
- Document J Building Regulations (Combustion Appliances)
www.planningportal.gov.uk
- The National Association of Chimney Sweeps (NACS)
www.nacs.org.uk
- Smoke Control Areas—The Rules
www.gov.uk/smoke-control-area-rules
- The Arada YouTube channel features videos to get the best from your Arada stove.
www.youtube.com/user/aradastoves

10 Guarantee

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

10.1 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 Arada 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). Warping and a red-oxide colouring will demonstrate the over-heating of internal parts; body paint which has turned dusty white is also indicative of such use.

The following guarantee periods shall apply in respect of the following Arada stoves:
Arada Ecoboiler comes with a 7 year guarantee to the main body.

The external paint finish and thermostat (if factory fitted) carries a one year guarantee only.

This guarantee is subject to the Terms and Conditions set out below.

10.2 Terms and Conditions

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

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. Your stove must have been installed by a suitably qualified person and in accordance with the manufacturer's installation instructions. Stoves not installed by a suitably qualified person or not installed in accordance with the manufacturer's installation instructions will not be covered by this guarantee.
 6. 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.
 7. 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).
 8. All boiler stoves must have rust inhibitor used at the correct concentration and this must be replaced on an annual basis for the warranty to be valid.
 9. The following consumable service items are not covered by this guarantee:
 - Firebox linings
 - Grate / grate bars
 - Fuel retainer
 - Throat plate
 - FED plate
 - Gaskets
 - Door glass
 - Seals
 10. 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 and chimney defects or corrosion caused by condensation, damp or water ingress into the flue, chimney or the surrounding of the stove.

11. 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.
12. 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.
13. 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.
14. 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.

10.3 General

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

If you believe your appliance is not working correctly or it has broken components, in the first instance please contact your local retailer or installer for assistance.

This guarantee is applicable in the UK only and operates exclusively in accordance with the laws of England and Wales.

ARADA

— DEVON —

All Arada Stoves are manufactured in the UK

Arada Ltd

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

www.aradastoves.com

T: +44 (0)1297 632050

Email : info@aradastoves.com