

SM70 Oven - instructions

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Thank you for choosing the *SM70 Oven*. Please read these instructions carefully before using it ..

Safety

Please observe the following rules to ensure safe use of your solar cooker:

General – most people in Northern Europe are unfamiliar with solar cookers, so ensure that your *SM70* is not set up where others might get curious and inadvertently burn or scald themselves by touching it, especially children. Make sure you explain the danger to others in the vicinity.

Eye safety – the reflectors are designed to focus sunlight onto the cooking tube, but from some angles it will be possible for some sunlight to be reflected into your eyes. NEVER stare at these reflections, and do your best to avoid them completely by standing behind or to the side of your cooker. ALWAYS wear dark polarising sunglasses with good UV radiation filtering properties while using your cooker. Make sure others take the same precautions.

Risk of burns or scalds - remember that this is an oven, and it will operate at temperatures of over 200°C. Steam will escape past the bung, the food will be hot enough to burn your mouth, and the cooking tray will be hot enough to burn your hands. ALWAYS use oven gloves to handle the metal tray, and ALWAYS take the same precautions to prevent accidents that you would at home in your own kitchen while cooking and handling food.

Thermal shock - your new cooking tube is very tough, but it is made of glass. It will shatter if one part of it becomes much hotter than another part of it. NEVER pre-heat the tube, NEVER load the tray with frozen food, ALWAYS allow frozen food to thaw completely before cooking it, and NEVER introduce cold liquids once the oven has heated up to cooking temperature. NEVER overload the food tray so that food drops over the edge. NEVER introduce foods that will drip liquids over the side of the tray. ALWAYS let the tube cool down before attempting to wash it. Naturally, the tube may also break if you drop it.

Food safety – Your cooking tube is so well insulated that it can keep cooked food hot for several hours. UK food regulations require hot food to be kept above 63°C to prevent bacterial growth. ALWAYS check the core temperature before serving and observe sensible hygiene rules.

Setting up your solar cooker

- After removing all external packaging, unclip the legs and extend them fully, and to the side, as pictured on the right.
- Open the two clips next to the carrying handles and separate the reflectors until the support strut is fully extended.
- Before using your oven for the first time, thoroughly wash the inside of the glass tube and the stainless steel food tray, and peel off the plastic film that has been protecting the reflectors (1).
- Unscrew the knobs indicated in picture (2) by a couple of turns (there is one knob at each end of the cooker) and tilt your cooker towards the sun.
- Find the aiming spike shown in picture (3) and adjust the cooker again until the spike casts no shadow. Your cooker will then be pointing directly at the sun. Make sure the knobs (2) are done up again (firmly but not too tightly) once your cooker is in the correct position. Remember that you will need to aim your cooker at the sun again every 15 to 20 minutes as it travels across the sky. Now turn your cooker away from the sun or shade it until you are ready to cook.



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Cooking

Unpack the stainless steel food tray. PLEASE NOTE that the tray may be splayed a little so that the sides are wider than they should be in the centre of the tray. If this is the case, you will feel a bit of resistance when you first try to insert the tray into the tube. DO NOT force the tray into the tube. Instead, withdraw it and squeeze the sides together gently in the middle until it slides easily into the tube.

On first use, you will notice that the seams along the tops of the sides of the stainless steel food tray will bleed some flux that was used during manufacture. We recommend that before cooking food you load the tray with something to absorb the heat – a handful of clean metal cutlery for example – and then allow the oven to attain a temperature of 180°C. Use the thermometer behind the wooden handle to check this. Carefully remove the tray and clean any residue from along the seams before cooking your food.

The thermometer in the bung at the end of your cooker measures the air temperature inside the cooking tray. Use it to estimate the cooking time required. Cooking times are similar to those required in a conventional oven, but will vary with the strength of the sunlight available.

DO NOT overload the food tray. Make sure that the food is not touching the glass. DO NOT push the bung too tightly into the tube – steam will need to escape past the bung. Remember that small pieces of food will cook more quickly than large pieces so cut it small for more rapid results. Remember that bread and cakes will expand while cooking, and allow space for this.

For recipes and ideas about what to cook, why not visit the blog on our website at: www.slicksolarstove.com

Caring for your cooker

The tube can be cleaned as you would clean any glass cookware. Carefully remove it by unscrewing the clips that hold it in place. Use warm water and some detergent to soak off any burned on deposits. Use the brush supplied with your cooker to clean the inside of the tube. The food tray can be cleaned as you would clean any piece of stainless steel cookware. Do not put the wooden handle into your dishwasher.

If the shiny reflectors become marked, clean them with a soft damp cloth.

Take care to pack your cooker properly when you transport it. You *can* invert the food tray and fold its handle down inside the case for storage, but you may prefer to pack the cooking tray separately to reduce the risk of a force being exerted by the metal tray onto the inside of your tube.

Things you will notice while using your SM70

When you insert or withdraw the food tray, you may occasionally encounter some resistance. This may be because you are not holding the food tray straight. Make sure you keep the tray straight, and DO NOT force it.

Occasionally, the knurled knobs at the sides of your cooker may over-tighten. If you are unable to unscrew them, try gripping the main beam on the underside of the cooker, and the end of one of the legs. Then rotate the leg counter-clockwise. You should find that the knob frees itself. If not, contact us for more instructions.

When you cook food items containing water (e.g. vegetables) you will notice steam coming from around the bung next to the thermometer. This is normal. It shows that the temperature in the cooking tray has reached 100°C and that the water is beginning to boil off.

When you see steam escaping around the bung, you will also see some condensing on the colder metal parts of the handle. The resulting water will drip onto the lower reflector. This is normal, and you can clean the reflector with a soft damp cloth.

If you cook bread, which will have to be in the shape of a baguette, you will notice that the end that is furthest away from the bung will brown more quickly. This is because there is a temperature gradient in the cooking tube. The closed end is always hotter than the open end. Take this into account when you cook. For example, you can remove and turn round your bread half way through the bake so it browns more evenly.

The metal food tray will get very hot, and you may find that some foods will overcook where they are in contact with it. For example, if you cook eggs in their shells, you may find a brown area on the shell where they have been resting on the tray. Using something to between the food and the tray, such as a sheet of aluminium foil, or high temperature silicone oven mat, will prevent this.

Your SM70 tube is so well insulated that, once your food has reached its cooking temperature, it will not need any further sunshine to keep cooking. This means that it is possible to take advantage of brief periods of sunshine during the day to cook your food. Once your food is cooked, the tube will keep it hot for hours.

Our mission

Here at SLiCKsolarstove we hope to encourage the use of solar/integrated cooking in Northern Europe, and beyond. As part of our enterprise, for every SM70 we sell, we will be donating £5 to a charity that supports our aims in the third world. More details are available on our website. We welcome contact from all solar cooks and we are keen to hear of your experiences – successes *and* failures – so we can all learn from each other. Please visit our website frequently and let us know how you are doing and/or ask for advice.