

Hybrid Portable Stove Barbecue

by Little Wolf Energetics



Hybrid Stove for cooking



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Introduction

The Little Wolf Hybrid Stove-Barbecue is a biomass burning stove that doubles as a barbecue due to its ability to produce both clean-burning gas for cooking during combustion and charcoal for barbecuing. The benefit in this is obvious: both phases can be used for a different purposes, making this stove a truly versatile and indispensable addition for your family. Not only will it be handy for those field trips, but for the unexpected disasters where standard fuels are not available.

The fuel can be whatever you have, such as pellets, wood chips, sticks, charcoal, what have you. This feature is of great benefit to you and the environment, very cost effective and practical. It works with or without the fan, which increases the efficiency and controls the heat output of the charcoal phase very effectively. Internal 8 AA batteries can be charged with a 12 volt solar charger/battery maintainer, or can be individually removed from their clip for charging. You can replace the batteries without having to buy a complete battery pack.

This multi-purpose stove is versatile. It even fits neatly into our coffee table fire pit, to create a unique experience for you and your guests – one that they shall not soon forget.



Instructions

- 1) Place the stove on level ground, shelter from wind and away from combustible material.
- 2) Remove the two grates, exposing the full diameter of the burner unit.
- 3) Place fuel in burner – we suggest you start with ½ load of pellets or 1-2 inch dry sticks. Time your first burn so you can predict the burn time. **Fire is started from the top.**
- 4) Starter material is everywhere: wood chips or shavings, which are available in any pet store or shredded wax beverage containers. Birch bark is good and starter gel can be used. Build a little teepee and set it on fire!
- 5) Once the top of the fuel is lit, you may turn on the fan. Do not do this too soon or it'll blow the flames out.
- 6) You may add fuel at any time, but do it gradually, especially pellets. It is dangerous to use liquid starter and it may damage the electrical. Once the stove is lit, the stove will be hot. Do not touch! You can operate the stove with or without the fan depending on the fuel – some may need it.
- 6) There are two phases to the burn: 1) cooking with the gas, and 2) barbecuing with charcoal you have produced. Two separate grates are provided for these functions. Do not remove a hot grate with your bare hands – use a stick or tongs.
- 7) There are two sockets: (+center) one for auxiliary 12 Volt power, the other for charging internal batteries using a 12 Volt solar or wall charger of less than 200 mA.
- 8) You can burn just about any dry solid fuel such as pellets, chips and sticks. These are gasified for flame cooking which results in a super hot bed of charcoal for barbecuing. In some parts of the world, dung is burned in many small stoves, but I doubt if they barbecue with it.
- 9) Do not restrict airflow at the bottom ventilation holes, as this could result in damage to the electrical components.
- 10) Shield the stove from rain and strong wind.

Safety

Take extra care to prevent burns. Any part of the stove could potentially be hot enough to burn the skin, so be careful. Keep children away and do not permit playing around this stove. Keep a stick around at all times, to tend the fire and removing the grates.

Note: For out door use only. One of the fuel gases in this syngas is carbon monoxide, which burns to form carbon dioxide. Therefore, to be safe, do not use indoors as there is always some CO, which could be dangerous.

Maintenance

Empty the ash regularly by removing and inverting both the burner, and the shell. Removing the sheet metal screws will allow you to change the fire grate. Remove any debris in the battery compartment by removing the base plate.

Solar Charging

You may recharge the batteries with a solar battery charger, or trickle charger using the “charge” socket. The internal rechargeable 8 Alkaline or NiMh AA batteries must be greater than 2000 mAh. When using a solar panel, recharging time depends on sunlight. Topping off the charge after normal use, may take several hours or longer depending on how long the stove has been used, and the strength of sunlight. Using the C/10 rule, you can charge the batteries without a controller as long as the charger is <200 mA. Never leave the batteries trickle charging for more than 8 hours at a time.

Warranty

Your stove is guaranteed for 1 year for parts and labor. Please address all warranty issues or questions to Little Wolf Energetics by email, do not return to the dealer. We will take care of your situation from headquarters. Arrange details by email. For inquiries please contact us at:
Little_wolf@uralica.com.