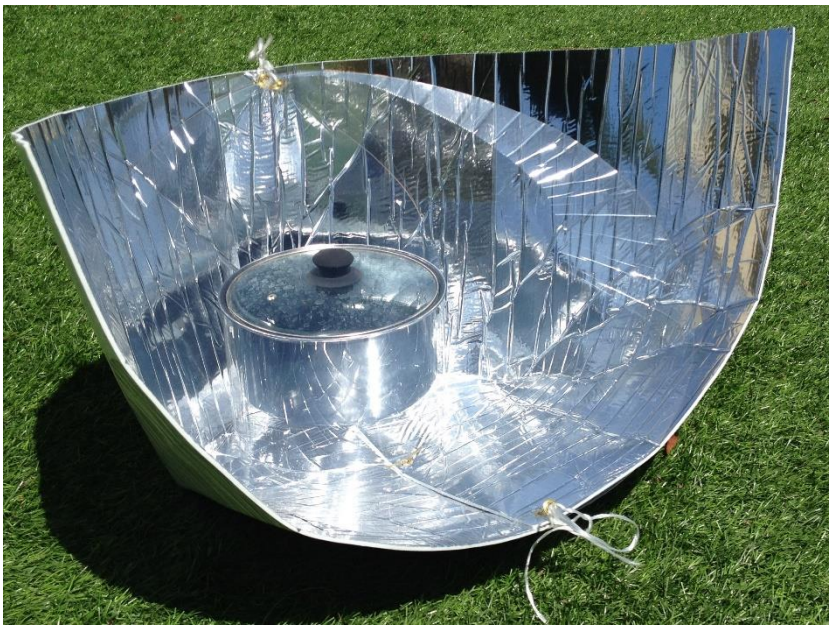
How to Assemble Your Haines Solar Cooker



Assembling the Reflector

1. Unroll the rectangle of reflective foam material, and briefly roll it the "other way" until it lies flat with the four cut sections facing you.
Find the hole in the short middle section, and insert the brass connector from the back, pointing up.

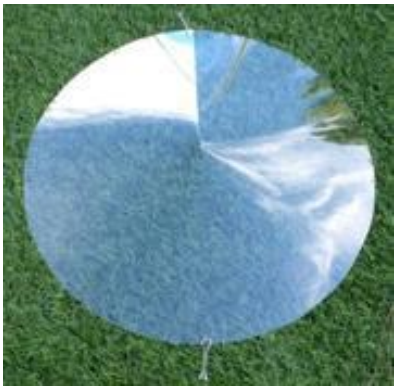
3. Fold and overlap the long middle section on top of the short section and slip its hole over the brass connector.
Bring the two outside sections to the middle, and slip their holes over the brass connector.
Spread the brass connector's two sides to secure the four pieces together.

Assembling the Cooking Sleeve

1. The cooking pot must be BLACK on the outside, with a top rim and no handles. The lid must be BLACK on the outside or clear glass.
2. Take the 6" x 48" rectangle of clear plastic film and roll it into a cylinder with a diameter slightly wider than the cooking pot, and secure it with paper clips as shown in the photo at left.

3. Slip the pot into the sleeve, with the pot's top rim resting on the top edge of the sleeve. The sleeve should elevate the pot off the reflector so the heat of the sun will be reflected onto the bottom of the pot. The sleeve also insulates the pot from the surrounding air.

Assembling the Windscreen



1. Overlap the sides of the cut in the 24" clear plastic circle about 2 inches, so that the holes line up .

2. Put a string through two holes, to form a flat cone.
3. Then attach the windscreen to the reflector by tying the string through the hole at the top center back of the reflector.
4. Attach the bottom of the windscreen to the reflector by tying a string through the hole in the bottom of the windscreen to holes in the bottom front of the reflector.

5. Make folds radiating from the inside "corners" of the reflector to conform to the circular shape of the windscreen. This traps the heat inside, for faster cooking times.

See: http://solarcooking.wikia.com/wiki/Haines_Foam_Insulation_Cooker

Haines Solar

Cooking with the Haines Solar Cooker

Cookers, Del Mar, CA 92014 bhaines@san.rr.com (858) 736-5505

1. The cooking pot must be BLACK on the outside to absorb the sun's heat. It must be round with no handles, and with a top rim that can rest on the top of the clear plastic cooking sleeve. The lid must be BLACK on the outside or clear glass.

2. When the sun is high, the base of the cooker should remain firmly on the ground, with the back slanted backwards, and the front raised a few inches off the ground, as shown.

3. When the sun is low, move the cooking pot forward a few inches to tilt the cooker downward so the that front is on the ground, and the back is raised. A brick under the back will insure that the back tilts forward. This will focus more low sunlight on the cooking pot.

4. Aim the open part of the cooker at the sun (so that the shadow is equal on both sides), and turn it a little every 1-2 hours, to follow the sun during the day.

5. On windy days, pass a string through the natural holes in the bottom of the cooker, and put a rock on each end of the string. So secured, the cooker can withstand quite strong winds.

6. **WARNING: DO NOT** leave an empty pot in the cooker in the sun. It will overheat, and damage the clear sleeve and the reflective material.

TIPS for Solar Cooking, from http://solarcooking.wikia.com/wiki/Introduction_%26_Cooking_Tips

- The golden rule of solar cooking is: **GET THE FOOD ON EARLY, AND DON'T WORRY ABOUT OVERCOOKING**. Cooking time depends on quantity, and is comparable to cooking in a 250-degree oven.

- You do not need to stir food while cooking. It will almost never burn.

- For your first attempt at solar cooking, start with something easy such as chicken, rice, zucchini, or quick bread such as banana bread. Baking potatoes is also easy, but don't wrap them in aluminum foil; just put them in the black pot without adding any water.

- Food such as roasts, stews, casseroles, poultry, potatoes, carrots, pot roasts and rice are almost impossible to overcook; therefore, the timing on the food is not critical.

- Chicken will still be juicy and will fall of the bone when solar cooked four hours instead of the usual two hours. A major advantage of solar cooking is the flexibility in cooking times.

- In cooking fresh fish, you can judge when the fish is cooked thoroughly when juice begins to drop. If you cook fish on a rack, it is easy to see this change. Then check to see that the fish is cooked to the bone in the thickest part.

- For best results, do not overcook the following foods: green vegetables, cookies, cakes, and bread.