

HOMEMADE COKE CAN ALCOHOL STOVE

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This is a spin on the homemade coke can alcohol stove after a fair amount of trial and error. For whatever reason, we are unable to find the link from which the original instructions for this stove were obtained. I do have my printed copy and credit is given to LaMar Kirby – Utah Lake District, Orem Ut. (lkirby@corel.com) for providing construction directions.

Start by assembling the supplies. You'll need tin snips, hammer, small finishing nail, drill, ¼ inch bit, small coffee can (11 oz?), two soda cans, a rubber band and some cotton string. Optional drill bits include 1/16 inch and ½ inch.



Drill holes in the bottom of one of the cans. These should circle the edge and a few in the middle. The very center hole needs to be large enough to thread the string through. The other holes should be about 1/16 inch. I have read that using a push type thumb tack makes a nice size hole, but I always managed to bend the thumb tack after one or two holes. A small finishing nail (brad) can be gently tapped through with a hammer or a small drill bit can be used.



Take the can with the holes and cut off the bottom, about 1 inch up from the bottom. Cut ½ inch slits around the cut edge, about every half inch.

Now take the other can and cut off the bottom, about 1.5 inches from the bottom.

Insert the can with the holes inside the bigger can. The slits are to make it a little easier to insert one into the other. Gently tap until one is snug inside the other.

Push the string into the center hole. 4 or 5 inches of string should be plenty. Leave about an inch or so hanging outside the can.



The fuel (alcohol) is poured into the top of the can. This will soak the string, which will act as a wick. The purpose of the wick is to keep the flame going until the alcohol is warm enough to stay lit. The wick is our primary contribution to the coke can design.

Our second contribution is the pot stand. We found that by using this pot stand, boil time was greatly reduced.

Start by cutting the coffee can down to about 3 inches. Drill holes with a $\frac{1}{4}$ inch drill bit around the base and upper lip of the can. Drill (or use tin snips) 4 of the holes at the upper lip of the can to about $\frac{1}{2}$ - $\frac{3}{4}$ inch in diameter.



The stand serves several purposes. It reflects heat in, it acts as a wind shield, and it holds the pot. When cool, it can hold the stove for packing. It is handy to have a glove to use a hot mitt (to lift hot pots from the stove), to extinguish the stove (quickly smother the fire and little damage should result to the glove), and also act as a cushion to keep the stove from rattling in the pot stand when packed.



Here is the package ready to go.



The lid from the coffee can won't fit snug without the original lip of the can so a rubber band is use to keep it together. The stove alone weighed about 0.5 ounces, the stove and pot stand together weighed about 2.5 ounces. The glove and fuel are extra. We were able to bring 2 cups of cold tap water to a boil in about 6 – 7 minutes.