

## Alcohol Can Stove Instructions

1. Turn 1 can over and using a sharp nail and hammer, poke 24-32 holes between the inside ring and the outside of the can. Do not poke the nail all the way into the can. This will make the holes too big. This can will become the TOP half of the stove. The other can will be the BOTTOM.

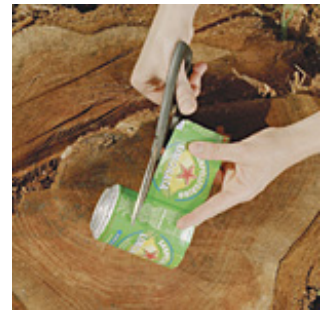


2. Using a utility knife, score the inside of the ring on the same can. Then carefully cut an "X" into the can and pry out the four pieces of aluminum.

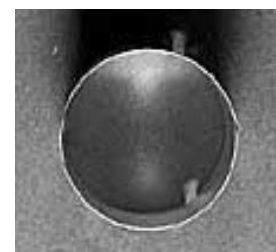
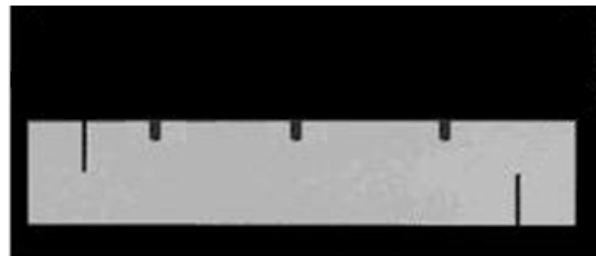


Using a round file or large drill bit, smooth out the inside edge of the hole you just cut. Smooth it further with a piece of sandpaper.

3. Turn the can over so and use a sharpie and a ruler to measure up  $\frac{3}{4}$ " from the bottom of the can and draw a line around the circumference. On the other can, measure up 1" from the bottom of the can and draw a line around the circumference.
4. Carefully use a utility knife to cut the cans just above the line. Use scissors to clean up the cut to the lines. Don't destroy the remaining pieces of can. You're going to need these later.



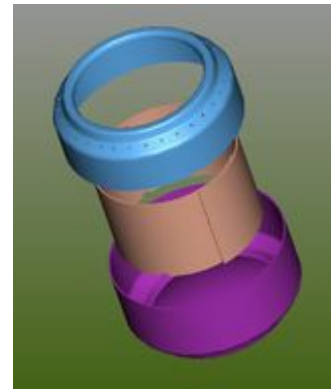
5. On one of the remaining pieces of the can, use scissors to cut out a rectangular piece of aluminum  $\frac{3}{8}$ " by  $7\frac{1}{2}$ ". The long sides of the rectangle should be as parallel as possible in order to prevent leaks in your stove.
6. Use scissors to make the cuts in the rectangle as illustrated. The two slits must be between  $5\frac{15}{16}$ " and 6" apart and are used to connect the rectangle into a ring. The slots are to allow fuel to move into the outside chamber of the finished stove. These slots should be about the size of a hole punch.
7. Roll the rectangle around and make a ring by connecting the two slots together. The ends of the rectangles should be on the inside of the finished ring.



8. On the bottom half of the stove, take a pair of needle nose pliers and make some small crimps in the top of the aluminum. This will allow you to slide the upper half over the lower half.



9. Place the ring inside the groove of the lower half of the can with the slots on the bottom half. Then slide the upper half over the lower half encapsulating the ring inside the grooves of the cans.



10. Firmly squeeze the two halves together and place a piece of flue tape around the seam. The goal here is to seal the ring inside the grooves and allow no gasses to escape between the ring and the upper half of the stove. You want all gasses created as the fuel vaporizes to escape through the burner holes in the top of the stove.
11. Your stove is finished and ready to test.

To fill, add a few tablespoons of fuel to the center of the stove. Light the fuel. As the liquid fuel heats, it will boil and release vapors into the chamber between the outside of the stove and the inner wall. As the vapors escape through the burners, they will ignite. Your pot will need to be elevated above the stove by rocks, or possibly three tent stakes inserted into the ground around the stove.

