



DIY Jet Stove - "Pocket Sized Alcohol Stove" (Fully-Illustrated)

by **ASCAS** on January 28, 2012

Table of Contents

DIY Jet Stove - "Pocket Sized Alcohol Stove" (Fully-Illustrated)	1
Intro: DIY Jet Stove - "Pocket Sized Alcohol Stove" (Fully-Illustrated)	2
What Is A Jet Stove?	2
Here Is My Video:	2
Step 1: Tools And Materials	3
Step 2: Washing The Cans	3
Step 3: Marking The Can	4
Step 4: Cutting The Can	4
Step 5: Putting The Cans Together	5
Step 6: Applying Super Glue	6
Step 7: Drilling Some Holes	6
Step 8: Sanding Everything	7
Step 9: Learning How To Make It Work	7
Steps:	7
Step 10: Your'e Done!	9
Related Instructables	10



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My name is "Angelo S. Casimiro". I got interested in electronics and mechanics when i was 4 year old. And started soldering circuits (kits) at 7 years old. And improved soldering at 9 years old without any kit only following circuit diagrams. And started making original circuits and schematics at 12 years old. Now i'm 13 and i'm already making customized PCBs, I already made a high quality amplified speaker (out of scratch) and a home theater grade amplifier. I've been happy with my achivements. I hope I will still improve ^_^ I'm looking forward to go to a school that has a specialty in electronics (Don Bosco Makati)

Intro: DIY Jet Stove - "Pocket Sized Alcohol Stove" (Fully-Illustrated)

Today I am going to show you how to make a "Jet Stove". A stove that can fit right into your pocket! The stove can be powered by hand alcohol or anything similar. There are tons of useful applications for it. You can use it for camping, for winter warming, during brownouts, when you run out of LPG tanks or for emergency purposes. Just follow the simplified instructions and you will do fine.

What Is A Jet Stove?

A jet stove is a small piece of contraption that uses alcohol as its fuel. It works when the can gets heated by the burning alcohol around it, heating the can causes the alcohol inside the stove to evaporate into flammable fumes, the fumes now exit the holes, the fumes now ignites into flames. It is a cycle.

Here Is My Video:



Step 1: Tools And Materials

Click on material to see where to buy.

Tools:

- Multi Purpose Pliers (Leatherman)
- Dremel (or similar)
- Scissors
- Sanding Paper (Fine)
- Marking Pen (Sharpie)

Materials:

- Alcohol (Ordinary/ Denatured)
- 2 Empty Soda Cans (Recycled)
- Super Glue (Gorilla)



Step 2: Washing The Cans

Be sure to clean the whole can by rinsing it with water. You wouldn't want impurities to mix with your alcohol. Mixing impurities with alcohol will degrade the stove's performance. After rinsing it with water dry it with a piece of cloth.





Step 3: Marking The Can

Use a marker to mark the can, try to use a flat base like an eraser as a guide to your marker, rotate the can in a circular motion until you complete the markings.



Step 4: Cutting The Can

First, puncture a small hole on the upper part of the can. Then use your sharp scissors to cut your desired measurements. Remember start cutting from top to bottom and the other can must be shorter than the other one (as shown in the last picture). After cutting both of the cans, sand the cans until the label wears off. Be sure to sand the label off the cans. If you don't sand it, the label will somehow melt and turn black thus ruining your stove's appearance.





Step 5: Putting The Cans Together

This is now the tricky part, sticking both cans together is the most painstaking task you will encounter in making the stove. I advice you to bend the shorter can's edges so it would be easier to insert the short can to the long can. Insert the short can into the long can. Use your Dremel tool for grinding the sharp edges left by the can.





Step 6: Applying Super Glue

Try to apply super glue into the small gaps left. Be sure to seal it or else flames might exit an unsuspected areas. Keeping the stove airtight as possible is a "must". Let the glue sip in the gaps.



Step 7: Drilling Some Holes

Drill you holes using a Dremel tool or just simply use a sharp object to puncture the can. Pleas do not make you holes too big nor too small. Don't forget to use a tape measure to guide your holes.





Step 8: Sanding Everything

Sand every last ink of the printed label, ink from the label usually burns then turns into a black substance. You wouldn't want to mess you stove's appearance.



Step 9: Learning How To Make It Work

Steps:

- 1st.) Pour alcohol into the stoves fuel inlet.
- 2nd.) Cover the inlet with a coin or magnet.
- 3rd.) Pour alcohol "around" the stove.
- 4th.) Set the alcohol around the stove on fire.
- 5th.) Wait until the jets works, you will hear a boiling sound.
- 6th.) Your'e done! Have fun modifying it :)))





Step 10: Your'e Done!

Good job. I will be posting updates and videos about this stove soon.





Related Instructables



Alcohol stove part 1 (video) by J@50n



drthumbs' Venom alcohol stove by drthumbs



Mini Alcohol Stove. by DenseJungle



Alcohol stove part 2 (video) by J@50n



Priming Wick for Alcohol Stove [and Pot Stand] by waranddiscord



Altoids Survival Kit and Keychain Survival by jtmax24