

# J. Falk's Base Camp Stove

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**The Best Base Camp Stove You'll Ever Build!** Backpackers, Hikers, Campers and Survivalists are discovering this powerful camping stove. Tired of cooking on small survival alcohol stoves? Want to make a meal for a few people? Here's an alcohol stove perfect for preparing full size meals using your household cookware.



**NOTE: For those of you living in hurricane areas, this is a must have emergency stove!**

## TOOLS & MATERIALS:

Safety glasses.

Hammer & Center punch or Drill with small drill bit.

Bottle opener (church key) or Uni-Bit with drill.

One gallon paint can. (New never used)

One quart paint can. (New never used)

Roll of toilet paper.

Denatured alcohol. (Warning: use only denatured alcohol for fuel)

3 wire coat hangers.

Cost - Less than \$5.00.

Build time - 15 minutes.

**STEP 1. PUT ON YOUR SAFETY GLASSES!!!** Always use eye protection when working with metal. Take your (new, clean and never used) gallon paint can and drill or punch a few small holes on each side of the rim of the can. Here I used a hammer and center punch and made three small holes on each side of the rim (evenly spaced across from each other). These holes will hold the cooking grill. Note: only make the holes large enough for the wire coat hanger to slide into. You can add more grill supports if you like.



**STEP 2. Make the cooking grill.** Take your wire coat hangers, cut and bend each support so they fit in the grill holes you created in step 1 above.



**STEP 3. Make the air holes.** Using your Uni-bit, drill 4 air holes (about 1/2" diameter) around the top rim of the gallon paint can. Then drill 2 to 4 air holes around the bottom rim of the can. Note: you can also create the air holes using a church key can opener.



**STEP 4. Make the burner.** Take the roll of toilet paper and remove the center cardboard insert.

Also strip off excess toilet paper so it will slide into the (new, clean and never used) quart paint can.



**STEP 5. Add Fuel.** Slowly pour denatured alcohol into the quart paint can. Note: the toilet paper acts as a giant wick and will slow the burning of the alcohol, conserving your fuel. Let the fuel soak into the toilet paper. Continue filling until a small puddle remains just above the top of the toilet paper. Once filled this stove will give you hours of cooking before you need to refill.



The toilet paper acts like a giant wick, which soaks up the denatured alcohol. With this stove its the fumes that burn. As long as the toilet paper is moist, it will create a big hot flame. When the top of the toilet paper dries out it will become burnt and crusty, simply take a razor blade and cut off the thin layer of burnt paper. To determine if you need more fuel simply touch the toilet paper, if it's not wet or moist and feels a little dry (or won't stay lit) then add more fuel.

**WARNING:** Everything described here is dealing with a cold (not ignited) stove, we want to avoid any Darwin Award incidents!

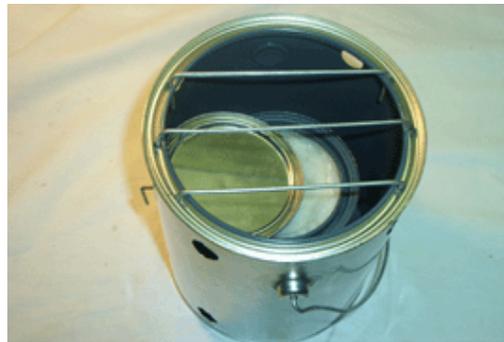
**STEP 6. Assemble and use the stove.**

- Place the quart paint can (the burner) into the bottom of the one gallon paint can.
- Place the grill supports in the rim of the gallon paint can.
- Place the stove outside on a safe, flat noncombustible surface.
- Light the burner (quart paint can) with a long neck lighter or long match.
- Place your cooking pot on the stove and start cooking.



**STEP 7. Adjust the flame.** You can control the flame by placing the lid for the quart paint can (before igniting) half way over the opening. Using a long stick or screw driver slide the lid back and forth over the burner opening to adjust the flame.

**TIP:** Make a support for the lid. Punch a small hole in the side of the gallon can, level with the top of the burner. Take a short piece of wire coat hanger (bend the end so it won't slide into the can) and slide it through the hole, resting on the rim of the burner and extending half way over the burner opening. This allows for easy adjustments of the lid over the burner's opening.



OR, make a few simmer lids. Get a few extra quart can lids and drill various holes to allow for different flame sizes.



**STEP 8. Extinguish the stove.** Remove the cooking pot from the stove. Using a pair of long nose pliers remove a few support grills. Using the pliers again grab the lip of the quart can lid and carefully place it over the burner, smothering the flame. Wait a while allowing the stove to cool down before touching the stove.

- **WARNING:**
- **After the stove is ignited it's HOT. Never touch any part of the stove, it will burn you!**
- **Do not attempt to blow the fire out and do not throw water on the burner this will only spread the fire.**
- **Smothering the burner with the lid is the only safe way to put the flame out!!!**

**STEP 9. Storage.** Make sure the flame is out and the stove and burner are cool to the touch!

- Place and seal the lid on the (burner) quart paint can. This is important in order to save your fuel for the next time you need to cook.
- Place the burner into the gallon paint can.
- Place the extra quart simmer lids and the grill supports next to the burner.
- Place and seal the lid on the gallon paint can.
- Store in a safe place.



#### TIPS:

**Always use stoves outside! Never use a stove inside a building, tent or survival structure.**

- 1) This stove is designed for use with household cooking pots!!!
- 2) Place the stove outside on a safe, flat noncombustible surface.
- 3) This stove uses denatured alcohol only. Be careful with alcohol stoves because the flame may not be visible in the light. **WARNING:** Never use gas or petroleum based fuels in this stove, doing so will melt and destroy the stove.
- 4) Always wipe you hands of any spilled alcohol before lighting the stove. Failure to do so could cause injury when you ignite the stove.
- 5) Always place the cooking pot on the center of stove.
- 6) Keep all body parts and clothes away from the stove at all times.
- 7) To avoid flare ups, always remove the cooking pot slowly from the stove.
- 8) Always remove the cooking pot from the stove before stirring its contents.

#### DISCLAIMER:

Use common sense and safety at all times when using any stove. The author of this web page will not be responsible for any injury or damage resulting from constructing or use of this stove design. If you choose to build, use or experiment with this design, do so at your own risk.

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