

Stay Warm with the Heiny Heater!

by [jambhack](#) on January 17, 2009

Table of Contents

- intro: Stay Warm with the Heiny Heater! 2
- step 1: Materials 2
- step 2: Prepare the Keg 2
- step 3: Cutting the Keg 3
- step 4: Chimney Collar 3
- step 5: Put your stove on a Pedestal 4
- step 6: I love it when a plan comes together! 5
- step 7: Fire in the Hole! 5
- Related Instructables 6
- Advertisements 6
 - Make Magazine Special Offer 6
- Comments 6

intro: Stay Warm with the Heiny Heater!

Here's another use for your empty mini-keg. Recycle it into a patio heater you can use for camping, tailgating, etc. I've seen lamps and wastebaskets made from mini-kegs. I used this little stove at a tailgate party to stay warm and cook hot dogs. It worked great!



step 1: Materials

Materials List:

Heineken Keg 5 cent deposit
48 oz juice can recycle
Large soup can recycle
Pizza Pan \$1.00 at the Dollar store
Ducting \$1.00 at the Habitat for Humanity Re-use store
Rivets, screws on hand

The juice can needs to have the top on it, can opener holes ok.



step 2: Prepare the Keg

First, empty all the beer from the keg. This is the best part of the process.

Make sure to bleed off any remaining pressure before proceeding.

Next, pry off the green plastic retaining ring on the top of the keg.

Pry off the plastic tap fitting in the middle of the top of the keg.

Use a screwdriver to pry up the lip around the metal tap insert. Use pliers to squeeze the pried-up lip together until it is narrow enough to push into the keg. Leave it inside until the next step.



step 3: Cutting the Keg

Now you're ready to cut an opening in the side of the keg. Size and shape is up to you. Caution! Cut edges are sharp! Use gloves while working with these edges. I used an electric saber saw with a metal blade but you could punch a hole in the side to get started and use tin snips as well. There are some parts inside that you can now remove and toss.

Sanding or filing the edges to remove jagged burrs after cutting helps.

Next, cut about 8 slits in the top radially outward to first ring in the top of the keg - about 1 inch. Bend these tabs up vertically for the chimney collar (soup can) to fit over.



Image Notes

1. Note "starter" hole.

step 4: Chimney Collar

Don't cut out the entire bottom of the soup can. Instead, cut a hole in center of the soup can's bottom leaving about 3/8 inch (1 cm) band of metal around the perimeter. I used tin snips. Slide the soup can over keg top tabs then bend the tabs back over soup can bottom perimeter band. I used a piece of dowel to bend the tabs back. You could use a hammer handle. For a more secure mount, drill through the tabs and soup can and install 2-3 sheet metal screws connecting together the tabs, can and keg.



Image Notes

1. Screws could go thru these tabs to secure collar to keg.

step 5: Put your stove on a Pedestal

Rivet the pizza pan to the bottom of the juice can. You could use sheet metal screws here too. I found out too late that the rim of the pizza pan should be up or else the stove is a bit bouncy. Paint the assembly if desired. Fill juice can with sand through the can opener holes to give it weight for stability.



Image Notes

1. Flip the pizza pan so the rim is up before attaching.



step 6: I love it when a plan comes together!

Drill or punch 3-4 holes in the bottom of the keg in a radius slightly smaller than the diameter of the juice can. Make matching holes in the juice can. I duct taped the can to the keg and hammered a small nail through the keg holes into the juice can. Use sheet metal screws to attach the keg to the pedestal. Insert the stovepipe into the soup can chimney collar. You may need to make sheet metal shims to ensure a snug chimney fit. Use the part cut from the side of the keg or old can lids.



Image Notes

1. Drill or punch down inside thru the keg bottom into the pedestal to make the screw holes.

step 7: Fire in the Hole!

Obviously, the Heiny Heater is purely an outside appliance. Make sure your first test firing is in a wide-open area, preferably with a breeze as paint and other can coatings will burn off.

Now kick back, tap another mini-keg and keep warm.




Related Instructables

<p>Subscribe to MAKE and get 5 ISSUES for the PRICE OF 4! Build, Hack, Play, Make</p>	<p>SPECIAL OFFER FOR INSTRUCTABLES MAKE Magazine</p>	<p>BONUS ISSUE » Get a FULL YEAR plus a BONUS ISSUE for only \$29.95</p> 
---	---	---

Comments

39 comments [Add Comment](#)

 **schneb** says: Mar 15, 2009. 6:45 AM [REPLY](#)

Great overall--love the scrounged/found materials and simple techniques, and good job using the blue tarp for the pictures--made things easier to see.

One thing though--maybe it's something with my computer, but when I click on the 2nd or 3rd photos with each step, they didn't open in the larger window. Maybe it's some glitch with the Instructables site, too. (and I'm using Safari--always bound to cause trouble).


Another thought: keeping it simple is good, but it could be fun to make a little door (out of the cut out piece of the keg?). I've got kids who otherwise might get too curious with the open hole thing.

If you did that, I'm guessing you'd have to cut some vent holes in the keg to allow air in when the door is closed. So...


Question#1: where to cut those vents for optimal air flow? Could you use pin-holes in a decorative design for those vents so when/if using the stove at night, the light would shine out and make the design visible?

Question #2: how to put out the fire if it's time to go? Could always pour water in, or something but that's messy. Is there a way to design something in--that's not too complicated--like the three-hole vents on a Weber grill, so you could close 'em and the fire would die down?


Then again, simplicity is the beauty of this thing--it's great as is and too many 'extras' would eventually make it a different kind of project.

 **sspen** says: Mar 8, 2009. 7:00 PM [REPLY](#)

Great instructable. Have you seen the Jotul DF 370 GV gas stove? Great minds think alike. How much wood can you get in the stove? How about using a regular beer keg?

 **Resident Explosives Expert** says: Mar 4, 2009. 12:59 PM [REPLY](#)


make one that can run off a camping propane tank & instead of having a gaping hole, drill out vent holes in the bottom, and have the top part, chimney & all, hinge open to reveal a mini grill inside for all ur dogs & burgers

 **middlenamefrank** says: Feb 24, 2009. 4:35 PM [REPLY](#)


Does it need such a long chimney? I'd have thought it would work fine with just the juice can, or maybe not even that. And I'd think the shorter the chimney, the better the fire could breathe. Of course I suppose the long chimney is pretty effective at keeping the smoke out of your eyes.

Also, I wonder if the joints could be soldered after they're crimped. Soldering joints like these is very easy with a propane torch and some plumbing solder. Of course the heat of the fire may cause some of the solder to reflow during operation but I wonder how much of a problem that would really be.


Great instructable overall though, and I love wood as a fuel whenever it can be used. It's generally the cheapest source of energy and always much more environmentally friendly than petrochemicals.

 **rosemore** says: Feb 28, 2009. 6:00 PM [REPLY](#)

My maple syrup evaporator calls for 2x the length of stove pipe as the length of the evaporator for the purpose of a better draft and efficient burning of the wood.

 **middlenamefrank** says: Feb 24, 2009. 4:40 PM [REPLY](#)

Oh another thought...stove paint. It's a bit of a specialty item and not super cheap, but I bet it would make your stove last a LOT longer. I doubt those unprotected tin cans are going to survive very long outside before they rust through; a coat of paint should be very helpful with that. That stove paint cures up pretty hard when you heat it up the first time. Engine paint might work too.

 **A good name** says: Feb 19, 2009. 7:31 PM [REPLY](#)

Could I logically just cut a hole in the side of a coffee can, throw pancake mix on it, and make dinner?
(Well, after starting the fire of course)



merseyless says:

yes but there wouldn't be any chimney effect.
and go pancakes! (bringing circular fun since before jesus!)

Feb 23, 2009. 3:03 AM [REPLY](#)

for a chimney effect i suggest that you cut small holes (the size of a penny (how big is a penny? (australian))) or the size of your thumb in the bottem and top sides of the coffee can, get a small fire started and put can over using the pre-made big hole and you get the chimney effect. (the hot gas has to rise up to escape)



cementbrains says:

Great project
Is that an elegant punt in your yard also?

Feb 21, 2009. 6:26 AM [REPLY](#)



illdoyourdrugs says:

Congrats on the win. This is awesome, easy and smart. And to think all those wasted hiney kegs! Shame. Possibly you could come up with more mini keg 'ibles! im sure we'd all like that. Peace.

Feb 20, 2009. 1:00 PM [REPLY](#)



balmuge says:

This is an awesome project. Great work. Ill be making one soon!

Feb 5, 2009. 12:14 PM [REPLY](#)



technodude92 says:

At first glance, I thought this was an instructable about a butt warmer. further investigation proved otherwise. Great 'ible. Oh and how much for the boat?

Feb 4, 2009. 1:52 PM [REPLY](#)



awang8 says:

Wouldn't it make more sense if you sanded off the paint before firing it up? That black can kinda looks really disgusting.

Jan 24, 2009. 8:02 PM [REPLY](#)



neffk says:

looks tippy

Jan 22, 2009. 7:45 AM [REPLY](#)



jambhack says:

Several pounds of sand in the pedestal makes it fairly stable.

Jan 24, 2009. 11:25 AM [REPLY](#)



codwithchips says:

hi will it burn charcoal this is super duper

Jan 22, 2009. 3:13 PM [REPLY](#)



mackamitsu says:

it should but, be careful about how much ventilation the charcoal gets, as too much forced air can make it burn too hot for the can.

Jan 23, 2009. 3:23 PM [REPLY](#)



IX Smith XI says:

this will be grate for camp-out in the snow

Jan 22, 2009. 3:08 PM [REPLY](#)



beff50 says:

that is cool, and very cheap. but what can you use for fuel? just regular timber and kindling?

Jan 22, 2009. 1:14 PM [REPLY](#)



fun bun says:

(removed by author or community request)

Jan 21, 2009. 7:40 PM



gubbeper says:

What a totally useless comment!

Jan 22, 2009. 9:31 AM [REPLY](#)

Cool project! :)



billytkid says:

Well...thats constructive!

Do you have a better idea?

Its good to share! :)

Jan 22, 2009. 7:39 AM [REPLY](#)



chamunks says:

MiniKegPuter Its all i have to say! I wish i still had my pics from when i made one. But this is pretty sweet it makes me want to get another one of those mini kegs.

Jan 23, 2009. 4:17 AM [REPLY](#)



Matin says:

Great stove. I plan to make one. I would think it would work with one stove pipe section and there by be more stable. Should beat an open fire where you have to put up with a lot of smoke and with the draw of the chimney it should burn clean and hot. Thanks for the idea and work.

Jan 22, 2009. 8:45 AM [REPLY](#)



supremedragonx says:

i think mabye better high temp spray for bbq .. Krylon ->cheap

Jan 19, 2009. 6:16 PM [REPLY](#)



jambhack says:

I only painted the pedestal and it did not appear to get too hot.

Jan 20, 2009. 10:19 AM [REPLY](#)



supremedragonx says:

o, that's cool

Jan 21, 2009. 10:16 AM [REPLY](#)



kathynv says:

What do you use for fuel in your heater? The Girl Scout in me would use a tuna-can stove to complete the motif, but a can of Sterno would probably work better and be less harmful to the environment. Great little stove. I'm going to have to ask at the can return place and see if they have one of those cute little kegs. (I don't drink alcohol.)

Jan 19, 2009. 1:13 AM [REPLY](#)



jambhack says:

I burned lumber scraps.

Jan 20, 2009. 10:20 AM [REPLY](#)



unjust says:

you can aquire them pristine at a home brew supply shop, or you may do better with a quick tour of the local university fraternity row on recycling day.

Jan 19, 2009. 11:57 AM [REPLY](#)



chuckr44 says:

You can use small sticks, twigs, and pine cones. Break them into sizes that will fit into the stove.

Jan 19, 2009. 6:46 AM [REPLY](#)



Scubabubba says:

Are the mini kegs steel or aluminum?

Jan 19, 2009. 10:27 AM [REPLY](#)



jambhack says:

Steel - like a big tin can.

Jan 20, 2009. 10:17 AM [REPLY](#)



Jeremy3ff says:

Not sure about the Heineken kegs, but the ones you would buy at a homebrew store are Stainless steel

Jan 19, 2009. 12:11 PM [REPLY](#)



falcotheimpaler says:

hehe... homebrew. makes sense in so many ways.

Jan 19, 2009. 6:36 PM [REPLY](#)



jwilson27 says:

Jan 20, 2009. 6:47 AM [REPLY](#)

Great instructable! I'll have to make one this weekend. Of course that means I'll have to drink more beer to get an empty container... darn the luck :)

"Boat for sale" = LOL!



Meggeler says:

Jan 18, 2009. 6:42 PM [REPLY](#)

Great - I've wondered what to do those 'neat' kegs. Made a lamp out of a Coors once, just put it up 'cuz no body likes it but me. If I make a heater maybe they'll like me again :)

Thanks a great Instructable.



unjust says:

Jan 19, 2009. 11:56 AM [REPLY](#)

home brew and refill em.



krazymonkey74 says:

Jan 19, 2009. 7:30 AM [REPLY](#)

Looks good I need to try to make one.
