VortexED "55" Ignition Instructions

Remove the fuel canister.

Note* We strongly advise that you wait till the VortexED "55" has completely cooled off before refueling and re-igniting. We use leather/protective gloves for safety, always.

However, if you wish to re-fill and reignite immediately you must wear protective gloves to handle the canister. Follow the instructions to avoid injury.



Pour the fuel into the canister, filling about 80%- 90%, (if you are careful, you can fill to the top) to almost to the top of the canister, be careful!



Carefully place canister back into the VortexED "55". If you get alcohol on your fingers or elsewhere make sure to clean your hands before igniting.

*Again if refilling before the VortexED "55" has cooled off - you must wear protective gloves.



With a long lighter ignite the fuel from the opening between the glass panels at the corner.

Never attempt to light the VortexED "55" by reaching inside of it with the lighter.



To TURN-OFF/ Extinguish your VortexED 55:

- 1. Use the included "Snuffer" (a solid flag shape metal piece).
- 2. Simply insert vertically through the side glass panels
- 3. Once inside, turn the snuffer to the side (horizontally)
- 4. Extinguish the flame.

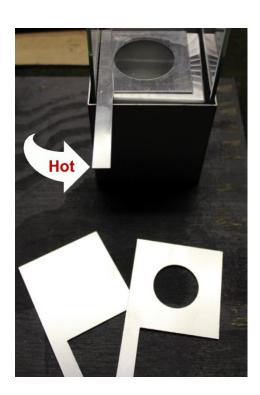
Re-Ignition Instructions

We strongly recommend that you wait till the VortexED "55" has completely cooled off before reigniting.

Snuffers with Holes

Snuffers with holes can be used to make the flame smaller, consequently making it last longer.

However, you must exercise caution when removing it - as the handle gets HOT. The new generation of snuffers has a silicone sleeve molded on to it. Caution must be used on the bottom of the VortexED "55" AS IT DOES GET HOT AND CAN AND WILL DAMAGE THE SURFACE IF IT IS NOT PROTECTED PROPERLY.



About the FUEL

Alcohol fuel sold separately. You may use of-the-shelf 70% Isopropyl Alcohol (\$.89 to \$1.50 a quart retail). You may also use Denatured alcohol - note this will change the color of the VortexED "55" flame to Blue. This can cause if the use is prolonged, it can break the glass, 30 minutes, no more!

Always Practice Common-Sense and...

NEVER pour fuel onto a live fire! If you decide to use a fuel other than Isopropyl Alcohol ALWAYS make sure it is safe to burn indoors and read any and all safety instructions.

Q & A

Q. There are three 'SNUFFERS'. I get that the solid one is for snuffing the flame out but not sure about the second/ third one with the holes in the center. It seems to tame the flame a bit but the arm sticking out of the glass doesn't make sense. Is the unit intended to be operated with the entire snuffer in place?

A. The snuffers with Holes are to lower the flame. The reason for the arm/ extension is so that you can insert the snuffer without coming close to the fire. Again, Snuffers with holes make the flame smaller.

Q. Also, the fuel (isopropyl alcohol) we had at the house is 70%. I think the fuel can be bought at 99%. Do you recommend one over the other?

A. 70% is fine and is usually costs less, anywhere from \$1.50 to \$.89 cents a quart (depending on your market prices). 99% can be more expensive and doesn't burn any better (actually worst). However, you could switch to denaturized alcohol for your VortexED "55" and the flame will burn blue. Denaturized alcohol is available at Home Depot or Lowes for about \$15.00 a gallon.

Q. Finally, how much alcohol should go in to the fuel container? Is there a level that should be maintained for optimum performance?

A. Typically filling the container about 80%- 90% is best (we fill to the top). After a few burns, there will be water/hydrogen at the bottom of the cup, dispose of it. It will not

burn.

Further Recommendations...

- Keep a flat piece of stone, marble or any heat resistant shield between your VortexED "55" and the table surface. It can and will get hot.
- ALWAYS make sure the fire is completely OUT and COOLED before handling the FUEL canister.
- NEVER pour any flammable liquid onto a flame. Fuel vapors can and will ignite creating a very dangerous situation.

Estimated Burn Times for VortexED "55" (1 quart = 32 ounces)

24" VortexED "55" Fluid level Maxed at 96 ounces	Burn Time
Without Snuffer - 4" Opening	Roughly ~ 2 hours, 7minutes
With 3" Snuffer	Roughly ~ 1hour, 40minutes
With 2" Snuffer	Roughly ~ 5 hours

18" VortexED "55" Fluid level maxed at 56 ounces	Burn Time
Without Snuffer - 3" Opening	Roughly ~ 3 hours
With 2.5" Snuffer	Roughly ~ 2hours, 9minutes
With 2" Snuffer	Roughly ~ 2hours, 43minutes

14" VortexED "55" Fluid level maxed at 32 ounces	Burn Time
Without Snuffer - 3" Opening	Roughly ~ 1hour, 30minutes
With 2.5" Snuffer	Roughly ~ 2hours, 24minutes
With 2" Snuffer	Roughly ~ 2hours, 44minutes

12" VortexED "55" Fluid level maxed at 23 ounces	Burn Time
Without Snuffer - 3" Opening	Roughly ~ 2hour, 6minutes
With 2" Snuffer	Roughly ~ 2hours
With 1.5" Snuffer	Roughly ~ 4hours, 12minutes