Flamethrower Plans

The following plans show how to construct a hand-held device capable of shooting flames up to 30 ft. It is primarily intended for use in burning out insect nests such as wasps, ant hills and bee hives or to ignite brush, leaves or rubbish piles. This device can be a very dangerous weapon in the wrong hands. It should not be constructed unless the builder is thoroughly aware of the hazards involved.



The range of the device is typically around 30 ft but using various types of nozzle heads, a variety of ranges and flame characteristics can be attained. With a wide vaporous stream, a virtual wall of fire can be created but with shorter range to about 5 ft.

However

remember that a wind or stiff breeze blowing towards the user can produce dangerous heat backlash when a mist spray is used!

Construction

A fuel container for the device can be a small pressurized spray can. These are available from **Mcmaster Carr**. Their # is (404) 346-7000. They are empty canisters that you can simply fill with virtually any liquid. After they are filled with liquid, you just screw on the top and pressurize the can with an air hose or even a tire

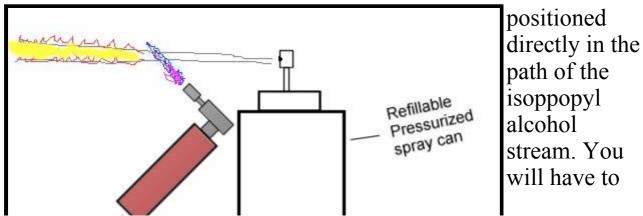
pump to around 100 PSI. Then it acts just like an ordinary spray can except that it's re-fillable.

The Fuel

We have tried many different types of fuel for the flamethrower and found the best type to be "Isopropyl Alcohol". It is by far the safest and since it has a very low flashpoint (flashpoint is the temperature that it ignites at), it ignites easily and burns quickly without leaving any residue from unburned vapor. You must use industrial type isopropyl alcohol of about 99% purity. The stuff known as rubbing alcohol is only about 30% isoppopyl alcohol and won't burn very well. Check your local chemical supply store. The nice thing about 99% isopropyl alcohol is that it evaporates almost immediately when it is sprayed so it does not leave a mess. The pressurized spray can usually comes with several different nozzels for wide mist or a tight stream. The tight stream is reccommended for safety. It will shoot to about 30 ft and is much safer on windy days.

Ignition

The flamethrower is ignited from a handheld Butane Torch that is mounted to it. You can buy these at any hardware outlet store or walmart. Be sure to get the type with electronic pushbutton ignition. These types have a small button that you press to ignite the butane flame. It will then stay lit until you turn the butane valve to off. The butane torch should be mounted to the spray can so that the butane flame points upwards at about a 45 degree angle as shown below. This will cause the heat from the butane flame to be



use your own

ingenuity in mounting the butane torch to the spray can. There should be at least 2 inches between the butane flame and the tip of the spray can nozzle. This will prevent the spray nozzle from melting or getting burned.

Operation

To operate the flamethrower simply turn on the gas valve for the butane torch and press the ignition button. The butane torch will ignite. Now take aim and press the nozzle on the spray can and the isopropyl alcohol will be ignited by the butane as it passed through the flame. It will produce a long flame 20-30 ft long. You should be very careful when firing the flamethrower until you get a feel for its range and what its capable of. The other nice thing about the isopropyl alcohol is that since its flash point is so low it will burn very very fast and so even though it is very hot, it is the safest fuel we know of for the flamethrower.

Notes