

Welcome to [Removed]'s page of "MagLite flashlight conversions!"

(hehe sorry about that one - couldn't help myself)

However - just a little legal stuff !!

DISCLAIMER : I CAN NOT BE HELD RESPONSIBLE FOR OTHER PEOPLES ACTIONS, DUE TO THEM READING THIS MATERIAL. THESE INFORMATIONS AND CONCEPTS CAN BE OBTAINED AND READ ABOUT IN MANY BOOKS, MAGAZINES AND ON THE INTERNET.

THIS IS ONLY MEANT AS MATERIAL TO SHOW THE PRINCIPLE AND A POSSIBLE WAY OF MAKING A SMALL ARMS SILENCER.

BE SURE TO KNOW IF SILENCERS ARE LEGAL IN THE COUNTRY OR STATE WHERE YOU LIVE.

ANY USE OR MISUSE OF THIS INFORMATION - IS YOUR OWN RESPONSIBILITY.

Well to get on with this here stuff :

A guy from GunBroker asked me through E-mail, if I could give a few hints as to how I made my silencer for my .22LR rifle.

So here's a few pictures and a small description of each part (those parts that I could disassemble!!)

First, have a look at this picture, maybe you recognise the 3 D-cell MagLite Flashlight. I placed a black flashlight for comparison reasons.

I bought it in green, because I didn't like the finish that the black flashlight had - and because I like the "glow" the green flashlights give off in daylight.

The one in the top, is a lightweight aluminium silencer with plastic baffels - an original silencer I bought after I made my own. =o) This one was surprisingly much like my own homemade silencer - when it comes to the insides of the silencer.



The silencer can be dismantled through the original opening where the batteries would normally go. The end where the silencer screws onto the rifle is permanently closed with a stainless steel bushing that I pressed inside the flashlight, I made the bushing so it was a slightly bigger in diameter and would just get stuck inside the flashlight tube. I also made an area with a smaller diameter on the bushing where I put on some binary epoxy-gluue to ensure it staying there.

The bushing is made at tight tolerances and with a standard 1/2" UNF thread, which is generally used on rifles with a factory made thread.

My Anshütz 1451 .22LR rifle came with this 1/2"UNF thread from the factory.

The bushing itself is pressed just about one inch or so, into the flashlight tube. Between the bushing inside the flashlight tube and the delrin (a type of nylon that is more heat-resistant than regular nylon) rod, I placed a "washer" of brass, to take the worst hot gasses and eventual flames. This "washer" is stuck in the binary epoxy-gluue and can't be dismantled. Together with the stainless steel bushing it makes a flame-resistant compartment where the hottest gasses and most of the gasses will be absorbed initially.

There is makes a good stop/support for the nylon/delrin rod that I have created to part the remaining empty space into small compartments, you will see this in the next pictures.

In this picture, you can see the silencer is dismantled.

You can see the delrinrod that I made to part the "battery space" into smaller compartments (6 individual spaces in the rod). The delrin rod is made 1mm smaller than the inner diameter of the flashlight-tube, because if the rod is made to the exact dimensions - it WILL get stuck in unburnt powder. Therefore I made it a bit smaller, and made the grooves with rubber O-rings at both ends of the delrin-rod - thus placing the rod Dead-centre in the flashlight tube.

The battery-cap is slightly modified too, I cut away a small portion of the spring, that part that holds the spare bulb in foam. The battery-cap was also drilled, so the projectile can escape. You can see that at the next picture.



In this picture, you can see the delrin-rod have been turned about 90 degrees. You can see the rod has a hole for the projectile all the way through and that there's much room for the gasses to escape into the 6 smaller spaces. In principle it's just like taking washers and springs - this is just one part with everything

in one piece. The holes in the brass washer, delrin rod and the battery-cap is 7mm - leaving just 0.75mm on either side of the projectile.

I haven't observed any signs that the projectile have touched the silencer at all - eventhough it is tight tolerances. The original silencer has 9mm holes throughout the entire silencer (and was to my surprise made in much the same way - except the brass washer).

The battery-cap has also been turned, and you usually don't want to look that way through the silencer...
Get my point??

The battery-cap together with the spring, holds the delrin-rod tight against the first stainless-steel bushing and brass washer. So the silencer doesn't make any sound on its own. Every part inside the silencer, is held by the spring - and the battery-cap closes and holds tight with it's own O-ring.



Working principles of a silencer :

The silencer absorbs the gasses from the powder-combustion, so the gasses doesn't give off the explosion-like sound that it normally does. The silencer only brakes the gasses, after the shot the gasses escape from the silencer.

A silencer with a high volume will keep more gas and can sustain or silence even semi-auto rifles. I tried this one on a friends semi-auto .22LR rifle, with great success. The original silencer began to lose effectiveness, because it couldn't take much gas or couldn't ventilate it out from the inner spaces.

My homemade silencer could hold enough for it to effectively silence a 15-shot magazine (ofcourse the gas that went out the back of the weapon - through the chamber, couldn't be silenced.).

A silencer is most effective on bolt-action rifles. As all the gasses ventilate through the barrel, into the silencer.

High-velocity cartridges can't be silenced - as they generate a sonic boom/crack.

If you use a .22LR rifle, try to use for instance CCI Standard and CCI Stinger cartridges. The Stinger can't be silenced, as it's faster than the speed of sound, and will generate the sonic boom/crack. The Standard cartridge is slower than the speed of sound, therefore it doesn't generate the sonic boom/crack.

In both cases the boom/report from the gasses are effectively stopped and will result in no noise with a silencer mounted.

If you use high-velocity cartridges, you will only get the sonic boom/crack.

Even an 8*57JS can sound as gentle as a .22LR rifle, I know my Mossberg .270Win sounded like a regular .22LR without a silencer. A friends silenced .223Rem Ruger rifle did sound high too - also about a .22LR or around there.

