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Rick Miller's SKS Muzzle Brake for the Yugo 59/66 SKS rifle

Article Written by: [R. Ted Jeo](#)

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We here at Surplusrifle.com are always on the look out for new products or ideas that would be of interest to our readers who shoot and own military surplus weapons. Recently, we learned of a muzzle brake that was designed specifically for the threaded end of a Yugo 59/66 SKS rifle. Jamie had recently reviewed an SKS muzzle brake for SKS rifles without the grenade launchers attached (most all except the 59/66) and his results are posted at <http://surplusrifle.com/reviews2006/sksbrakebipod/index.asp>. As I did not have one of these rifles, it made sense that I wanted to try out Rick Miller's device on my 59/66.

First off, many would say why even bother with a brake that reduces recoil and muzzle flip on a rifle that shoots such a small easy to handle cartridge. The answer is, well, why not? If it works, it makes for more comfortable shooting. Besides, the original is a grenade launcher, not a brake at all. Second to that, the brake that Miller makes looks a lot better than the original grenade launcher, so if you want to "modernize" your rifle, here is a way to do so and also get some functional use out of the new brake attachment.



figure 1

Rick Miller's 9 port muzzle brake is 2 ¾" in length and features 6 large side vents and 3 smaller vents on the top to counter flip. The locking ring is the only other part.

Miller actually makes three different brake types. There is a 15 port device about 2 ½ inches in length and 2 port with 5 rows that is about 2 1/8" long. And finally a 9 port device (2 ¾" long) that has three side muzzle deflecting ports and one line of ports on the top side to handle the muzzle flip. The weight of the brake is about 3.5 oz. All the brakes are 7/8" round and have 1" of thread that cover the threads on the rifle. I called Rick up and asked him which was the best, and he said that the 9 port device was probably the best. So I decided to try one.



figure 2

Comparison of the original SKS grenade launcher to the Miller brake. The original weighs in at 4.7 oz and the brake weighs 3.5 oz.

To start out with, you have to remove the grenade launcher that is on your rifle. We have several articles on the surplusrifle.com web site at:

<http://surplusrifle.com/shooting2005/grlauncherremove/index.asp>

<http://surplusrifle.com/shooting2005/grlauncherremove2/index.asp>

I will tell you right now, on **my** 59/66 rifle it was extremely hard to remove the launcher. It was easy enough to punch out the pin that holds the threaded launcher to the barrel. After that, all bets are off. I **THOUGHT** I had the right tools and sizes on hand to do the job. As it turns out, I could not remove the launcher using the standard methods mentioned in either of the articles. Instead, I ended up going to a local shop where the smith had to use Kroil, a pipe wrench and **REALLY** heating with a propane torch to make the launcher budge. In the end, the launcher "broke" and then simply spun off, leaving a nice set of threads to attach the new brake to.



figure 3

A threaded ring is first installed onto the muzzle. This allows the user to set the direction of the vent holes in whatever direction they want them to go and then lock the brake into place.

Attachment of the brake is very simple. The device comes with a locking ring that goes behind the brake so that the shooter can align the holes of the brake to optimize the muzzle braking effects and then lock the brake into place. I chose to make it the simplest and most straight forward to me. I aligned and set the brake so that the 3 vent holes were pointed straight up. Ideally, you would try shooting the weapon with the vent holes set at different angles to determine the best effect. There are no holes along the bottom, so if you shoot prone in dust, it would minimize the dust blow up.



figure 4



figure 5

Figure 4 is from the side showing the large side venting holes. Figure 5 is taken looking straight down on the brake. The round top vents are visible.

I took the rifle and the two devices out to the range along with some Wolf brand 7.62x39 ammo. All shots were done using the same ammo. In order to get some record of comparison between the two devices, I set up a video camera and attempted to record the results.



figure 6

Wanna make people nervous at the range? Show up with one of these attached to your rifle. Using the muzzle brake, you won't be able to mount the rifle grenade anymore (Note Photo was taken in Minn. and not Ca.).

The results were quite promising. Of course, there isn't much in the way of recoil anyway, but I can tell you that the perceived recoil that I felt was diminished. In addition, the muzzle flip was also reduced. You can view the videos and you will see the results. The grenade launcher shows no side muzzle gas venting and does have substantial horizontal movement of the muzzle. The brake shows venting of gases from all vents. Matter of fact, in the second video of the brake, take a close look at a pair of gloves set toward the

rear of the muzzle. The blast deflected causes the gloves to bounce around. In comparison of the videos, the muzzle appears to move rearward only about ½ the distance using the brake over the launcher. The flip is harder to discern in the videos, but there was a noticeable difference while shooting the weapon.

More info about Richard Miller

SRc: So, what made you look into the muzzle brake making for the SKS?

Miller: I wanted to take my gun and machinist knowledge and use it for income rather than just a hobby. When I researched to see what was out there and what was being requested I saw that there was a need for a threaded muzzle brake and decided to create something to fill that need.

SRc: What sort of machining background do you have?

Miller: I learned the basics from my Dad. He was a machinist for over 30 years. I've pursued it as a hobby over the years and have recently put that experience to work designing the different brakes and other gun related items.

SRc: What other weapons do you work on/with and what services do you offer?

Miller: I work with the following guns: AK47, AK74, AR15, L1A1, SKS, FAL., 10/22, 1919A4. The different products I sell are: Custom muzzle brakes, flash hidens, fake suppressors, AK47 pistol kits (minus the receiver) The different services I do are: Barrel threading, barrel shortening, parkerizing, gun coat. Other custom work on request as long as it follows legal shipping and other regulations.

SRc: How long have you been doing this type of work?

Miller: I've been working with guns since about 1989.

To contact Rick Miller, email him at: detect.miller@att.net
Or visit his website at: <http://brakes.ricksmuzzlebrakesandgunstuff.com/index.htm>

You may also call him at: (541) 782-2273 (Pacific)

Video Descriptions:

Title	Duration	File Size	File Type
Grenade 1. Video of standard grenade launcher shots. Notice the rearward motion of the muzzle.	00:30	1.59 Meg	Windows Media File
Grenade 2. Again, note the rearward motion of the muzzle. Also note the lack of venting gases from the muzzle.	00:40	1.93 Meg	Windows Media File
Brake 1. Note lesser amount of rearward motion as well as venting gases from sides/top of brake.	00:43	1.79 Meg	Windows Media File

Brake 2. Note amount of venting gases as well as the pair of gloves “dancing” in the muzzle blast.	00:42	2.08 Meg	Windows Media File
Brake 3. Again, note the venting gases and their location as well as rearward muzzle movement.	00:46	2.27 Meg	Windows Media File

In conclusion, I really like the looks and feel of Rick Miller’s muzzle brake. It was easy enough to install, once I got the grenade launcher off. And the brake really does work. At a cost of about \$30, it’s a good addition to your SKS that makes it look more “fierce” and does knock back the recoil and flip as well.

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