



Building My Own Mosin-Nagant M91/30 Sniper

Article Submitted by: Terry Lough

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Enemy at the Gates is a great movie about the Soviet struggle against the German war machine during The Great Patriotic War (WW2). The particular rifle highlighted in the movie that I really liked was the Russian Sniper **Mosin-Nagant M91/30**. It is a very beautiful rifle and was the workhorse in the Russian and later Soviet military. Millions were manufactured and many are readily available through military surplus firearms dealers. The cost of these fine rifles will vary according to condition and dealer pricing, but a "like new" specimen can be found for within the price range of \$79 to \$150. Most come with a bayonet, double ammo pouch, some small tools, sling, and a double bottle for oil and cleaner (*seen below*). Over all this is one of the best bargains on the mil-surp market today.



The Mosin-Nagant 1891/30 rifle is 48.5 inches long and weighs about 9 pounds. I have two of these rifles, one was manufactured in 1942 and the other in 1943. I purchased the 1942 rifle for \$72.95 and the 1943 for \$102.95. Both of my rifles were manufactured at the Izhevsk arsenal, which is indicated by a hammer and

sickle inside a wreath and an arrow inside a triangle on top of the receiver. Below is a picture of both rifles. The 1943 is in like new unissued condition with all matching serial numbers so I'm going to keep it exactly as it is. The 1942 rifle is the one that that I chose for my sniper project. The 1942 is in excellent condition and all the numbers match except for the bayonet, butt plate and magazine floor plate, both plates are lined out and stamped to match the receiver.



The 1942 is the one with the scope mount.



There are many modern scopes and scope mounts on the market today to suit many tastes. If authenticity is your goal then there are original scopes and mounts out there too if you look hard enough. The parts are not easily found but can be had (*at a premium price*) if you watch the online auction sites that cater to firearm parts. The scope mount on my rifle is an original that I won on ebay.

<http://www.gunbroker.com>

<http://www.ebay.com>

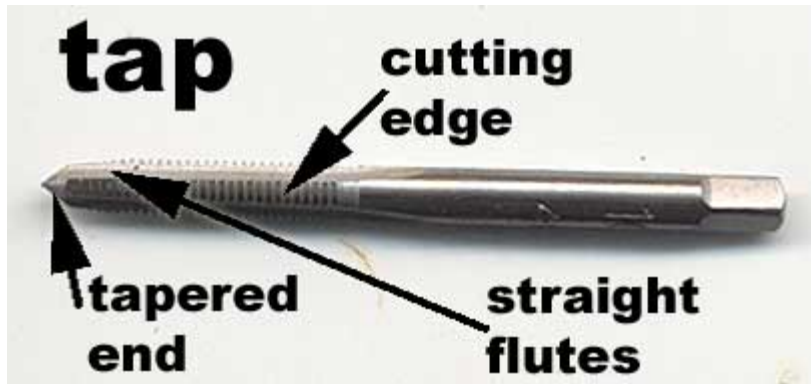
<http://www.gunsamerica.com>



For the project you will also need a modified turned down bolt handle. You can get a sniper bolt body from <http://www.buymilsurp.com> for \$69.00 plus shipping.

Before you can begin building your sniper you must own or have access to certain tools. many of the new manufactured mounts come with hardware, drill bits, and taps. This is not the case with the original equipment. You will need super glue or a strong clamp or both, a screwdriver to fit the mounting screws, cutting oil to cool the drill bit and tap, and most importantly a drill press, bench top or full size.

The MIT machinist reference describes tapping as -



A tap has cutting edges to cut the threads and straight flutes to allow chips to be expelled. The end of the tap is tapered slightly to help the tap get started. Taps are hard and brittle so you should be careful working with them (try not to drop them or force them into a hole when stuck). Be sure that the hole you drilled is the correct size for the tap you're using or it may break inside.

Put the tap in place and apply moderate pressure as you turn the tap. It's good practice to back the tap up a bit for every quarter turn of thread you cut.

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When you have all the material ready it's time to **disassemble the rifle**. Once disassembled set everything aside except for the barreled receiver. In the picture to the left the pointer shows where the base will be mounted. I looked at many pictures of actual M91/30 sniper rifles to get an idea of exactly (*or close enough*) where to mount the base I suggest you do the same. The scope mount I purchased is an original that included screws only. The screws are metric so I had to use my

own drill bits and taps.

Once you get the base positioned where it fits best, secure it with super glue or a strong clamp or both.

Put the bit in the drill press and put some oil in the base holes. Use slow steady downward pressure when drilling the holes.

When you are finished drilling remove the base and clean the oil and shavings from the base and receiver.

Get your tap ready and put some oil on it.

Insert the tip of the tap into one of the holes you drilled and turn it slowly clockwise and if it gets hard to turn don't force it back it off a little to release the shavings then continue to tap the holes. Make sure you keep the tap straight.

I had to drill four holes total, two for the mounting screws and two for the locating pins. Only the mounting screw holes were tapped. My mount also came with two small locking screws to keep the mounting screws from backing out. The mounting screws have small notches that have to line up with the locking screw hole in order for the locking screws to seat fully. I had to make new notches in my mounting screws but it was no big deal.



Once all of the drilling and tapping is complete attach the base to the receiver. It will look something like the picture to the left. Note the second notch I had to make on the larger mounting screws.

Having fun yet? Now it's time to work on the stock. After mounting the base put the receiver back on the stock. You'll notice in the picture it won't go back together just yet.



This is because the stock needs to be inlet to accept the base. Set the receiver exactly where it needs to be and mark the stock at the front and rear of the base. A high-speed rotary tool with a thin cutting blade works great for cutting the wood. Remove a little material at a time until you have a nice tight fit. The following pictures will show what I'm talking about.





Above is a picture of the scope I won on ebay. It is an original Mosin-Nagant PU sniper scope.



The final pictures are the finished product. This was a challenging project but Jamie and the articles on this web site gave me the knowledge and confidence to do it. It took about three to four months from the time I started looking for parts to the time I finished. I enjoyed this project.

Here is a project cost breakdown minus shipping:

Rifle – <http://www.aimsurplus.com> - \$59.95

Scope mount – ebay - \$227.50

Scope – ebay – \$154.52

Sniper bolt body – <http://www.buymilsurp.com> - \$69.00

Total cost - \$510.97



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