

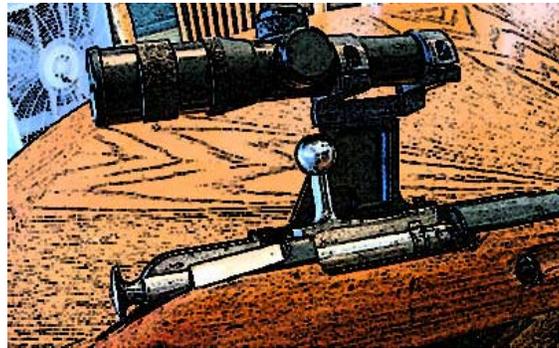


Kalinka Optics Warehouse User Manual

www.kalinkaoptics.com

Micro-Mosin-Sniper by Jamie Mangrum

Installing a side plate, mount and scope on your Mosin-Nagant, Mauser or SKS.



Special thanks to surplusrifle.com for their excellent article.

Ever since I watched the movie *Enemy at the Gates*, I have wanted to purchase an original Mosin-Nagant 1891/30 sniper rifle with a PU scope and mount (*as pictured below*).

I have seen and handled them, but price always rules out the possibility of acquisition.



1891/30 Mosin-Nagant PU Sniper Rifle

Next, I thought it would be a great premise for a Surplusrifle.com article to write about building my own sniper rifle. So, I started shopping around for the PU scope and mount but quickly discovered two facts:

1. The scopes and mounts are very difficult to find; and
2. When you do find them, they are really expensive.

Since the original parts are pretty much unattainable, the value of the article would be greatly diminished as no one reading it would be able to perform the same task. I then was surfing around the internet and was looking at the [Kalinka Optics \(www.kalinkaoptics.com\)](http://www.kalinkaoptics.com) website and found a Russian manufactured 1 inch tube, 3.5x20mm PO scope that looked pretty much like the original PU scope. After searching the same site a little longer I was able to find a similar, yet modern detachable, drill and tap type scope mounting rail and a detachable mount.

Granted it was not the original PU sniper setup, but it met two important criteria:

1. Both the scope and mount, together are only around *half of what an original PU scope and mount cost*; and
2. They are both readily available so folks reading the article can actually perform the same task if they like.

I contacted Kalinka and received the parts shortly afterwards. I decided to use a 1955 m44 Mosin carbine that I picked up for around \$50 for the basis of this project.



Detachable Side Mount w/ 1" (or 30 mm) rings (Base and Mounting Screws are included), PO 3.5x20 Compact Cleanview Rifle Scope (all available at www.kalinkaoptics.com)

Required Tools Not Supplied

To install this mount you are going to need some tools that you may or not already own.

First and foremost you should have a **desktop drill press**. They start at about \$59 and go up from there. I purchased two of the \$59 units and keep one in reserve (*better than a maintenance contract*). If you do any home gunsmithing then this is a **must own** tool. You will need a good rotary tool like the industry standard **Dremel Tool** with a good **Cut-Off Wheel**. This will enable you to make very precise cuts in the stock to fit the mount properly. You will also need a **number 5 metric drill bit** and a **number 6 metric tap** as the screws sent with the mount are metric or you can use other screws that match your tool set.



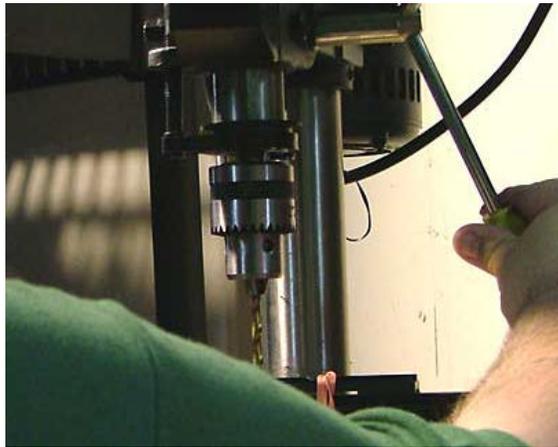
First thing you will need to do is to **disassemble the carbine**. To find complete instructions on how to accomplish this step go to <http://www.surplusrifle.com/carbinenagant/disassemble/hs.asp>.



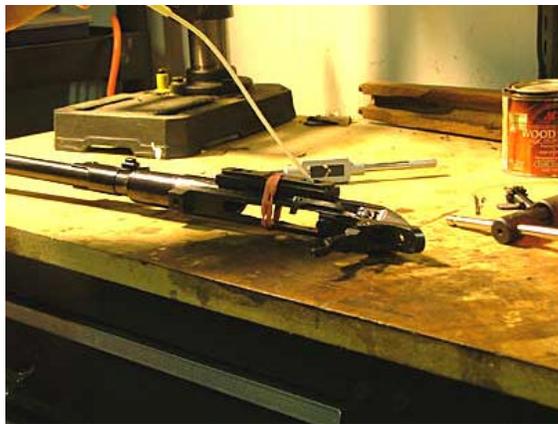
The great thing about this scope mount is that the mount is detachable from the base. You drill, tap, and install the base and then the mount slides on and locks onto the base. I found the lowest possible place you can mount the base on the side of the receiver is resting on top of the ejector and ejector spring (*as shown above*). I placed a couple of drops of Super Glue on the base and put it into place followed by wrapping a rubber band so the base would not move during drilling or tapping. **Note:** I use the base as a drill and tap guide.



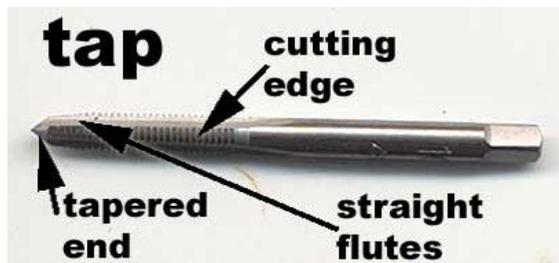
I centered the mount on the top of the receiver's ejection port.



Then using the Number 5 drill bit I drilled both holes through the receiver.

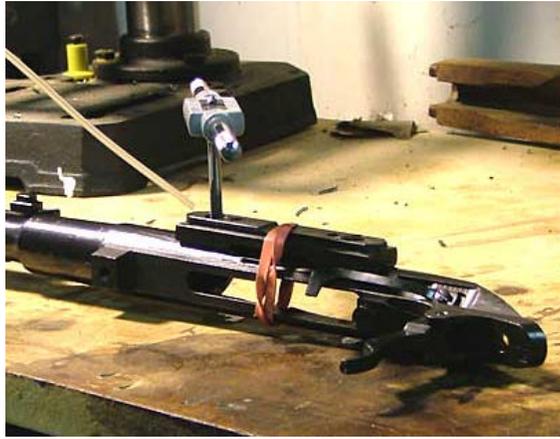


Before tapping the holes I made sure to place a good coat of machine oil inside the holes.



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.



The key to tapping is taking your time, **DO NOT FORCE THE TAP**. Turn a little bit at a time and then back out the tap and then move forward again. If the tap starts to hang or resists - **STOP** and back up. You do not want to break off a tap inside a hole. It is not a simple process to remove a tap that has broken off. I turn a little bit at a time, stop and oil, turn a little more, back off, and then start again. It may take a half an hour to tap (*thread*) two holes, but to do it without problem is well worth the investment of time.



The screws supplied with the kit are **very** stout. Because of this fact, once this rig is installed upon the receiver, it is **not** going anywhere.



The figure above shows the base installed on the side of the receiver and the mount sitting above it.



The figure above shows the mount slid onto the base and locked into place.



I then rested the barrel and receiver into the stock and took a sharp blade and marked the front and rear of the mount. This tells me where I need to cut with the rotary tool.



Using a good cutting blade on my rotary tool I cut the wood a little bit at a time until I had a tight fit.



The figure above shows the finished cutting job.



The mount was a little snug and creases the stock a little bit, before the base, the first time it is installed. I used a rubber mallet to tap it forward. To remove the mount I found I needed to tap it towards the rear as well. I think this is good because the more the mount is immobile, the better. Once the mount is on the base though it no longer is in contact with the stock at all. Only when sliding on and off. I did not want to remove any more wood.



I loosened the scope rings and slid in the scope. Lining up the reticle is easy and I tightened down the screws.



The figure above shows two things: **1)** The completed job; and **2)** the fact that you do not need to have a bent bolt handle for this scope mount. This is a great savings as a bent bolt handle will cost **you** between \$60 and \$100. I found loading and cycling the bolt handle in this configuration very workable. It would probably rate higher on the **coolness scale** if it did have a bent bolt, but this configuration works just fine.



Another good thing about this mount is that the original open sights are still very usable (*as shown above*).



The reticle design is based upon an original German reticle and also coincidentally the same reticle that the PU scopes have.



Now, you may be wondering why I did not worry about making sure the base was flat to the Nth degree. The reason is because the mount allows for both windage and elevation adjustments via screws on the mount. This is good as you can center the adjustment knobs of the scope and then dial-in the mount so the scope is in the ball park by using the mount's screws. The only bad thing I discovered was the small washers under the adjustment screws were somewhat fragile and I ended up replacing them with good locking washers.



Adjusting the mount and scope out at the range took me a little while to accomplish and a little bit of ammo as you can see by the figure above. The only awkward thing I found with this mount is - that in my opinion the scope sits up a little high. I think it is something that any shooter could get used to. It is just different. I think it would be a great mount for an SKS because it allows for the use of stripper clips while still being directly over the receiver and barrel. The scope is really easy to use once it is dialed in. I like the reticle very much. Kind of adds to the whole realism of it being a sniper rifle. I think this is a handy little setup that would work on many Soviet and non-Soviet made rifles and I am very pleased at how the final product turned out.