The AK47: Full Auto Conversion for Dummies

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An AK47 and his happy owner

Preamble

The AK47 has an long and infamous history, as the world's bestseller on the gun market, it has seen every conflict since its introduction in 1947. It is cheap, easy to manufacture and maintain and anyone who can hold a rifle and pull a trigger can be an expert on this weapon in an half hour.

Of course, every respectable nation on this planet has build one or two versions of the Russian rifle, famous are the Chinese, German, Finnish (Valmet), Israeli (Galil), South-African and the Dutch.....and many more I did not mention.

Let's begin with an wishlist

Of course, you cant just read this thing and finish reading and ending up with an full auto AK.. You have to get you're hands on a couple of things first.

You need the normal civil, sports, version of the AK47 or an AKM. Further you might want to have:

- Proper license for all these things, and the thing you are going to build
- Full auto parts set, I will point out how to make an template to fit these in.
- Full auto bolt carrier in those models who don't have one.

Proper license

In most civilized countries, there are numerous laws for these things. Mostly with an big no-no. If this occurs, you could do two things: 1) throw this paper away because it is no use for you. 2) read this paper, but don't do anything with this information.

Of course, I will advice number 2. But number 1 is not too painful either.

Full Auto parts

When you finally have your license and stuff, you could search for full auto parts.

Since there are a lot of AK versions out there, I will only mention the AK47 in 7.62 x 39. The .223 or .308 Remingtons or even 8mm Mauser fall a bit out of the scope, but since most versions look a like, most of this paper could also apply for your Galil, DMN1 or even Valmet. From AK47_parts.gif we simply need nr43 (hammer), 39 (disconnector), 45 (full-auto sear) and 48 (full-auto sear spring).

Installation of the parts

Sample of an AK47 template



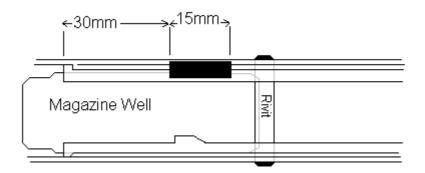
- Hole to span the reinforcing rivet in guns wich have this rivet. It only allows the template to lay flat on the receiver.
- 2: Automatic sear axis pin holes
- 3: Hammer axis pin hole
- 4: Trigger axis pin hole

Of course, this picture is not entirely correct, I suggest you to buy an metal template and drill and spotter set. Let's install this thing. At first we drill a 7mm hole on the left side of the receiver. On the right side we drill a 5mm hole. I don't have to mention that you are really taking an 5mm and 7mm drill, and that you punch the holes first to prevent them from taking a walk.

Of course, you disassembled the receiver already so you could secure the template on the left side, by placing the axis pins in the holes marked 3 and 4. Using a scribe mark a circle in the hole marked 2. After doing this, remove the template and the slave pins, and place the template on the opposite side of the receiver. Scribe the 2 hole as before and center-punch it. Then we drill the left side of the receiver with the larger of the two drill bits. We drill the right side of the receiver with the smaller of the two bits.

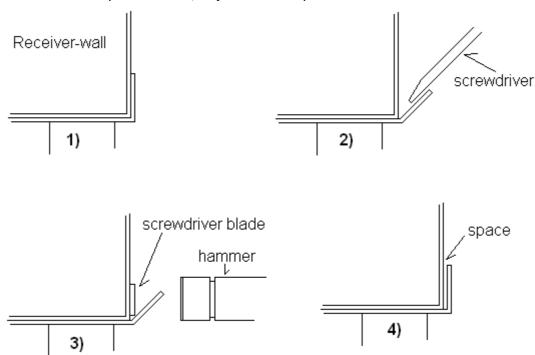
Then you take your template and place it very, very carefully on a table, we don't need it for the time being.

Then we go concentrate on the slotting of the bolt carrier guide rail of the receiver wall. If you look down in your disassembled AK, and you have the muzzle on the left you will see the following:



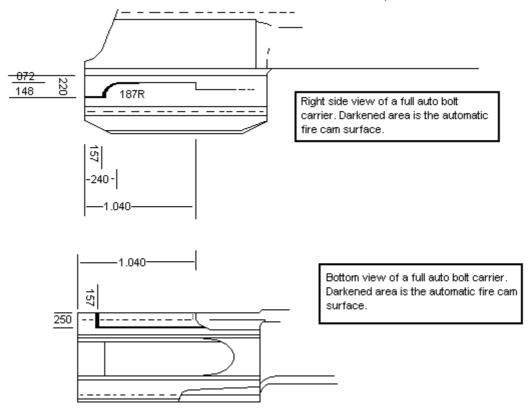
The dark area is where you will remove metal from the bolt carrier guide rail. This is for the trip arm of the automatic sear wich will project above the rail and engage a cam on the bolt carrier to produce automatic fire when the selector level is placed in the middle position. It is neater to slot it rather than cut it. You can do this by drilling a series of 1/16" holes next to the receiver wall. Then you will cut out the web between them using a Swiss file.

Depending on the maker if your rifle, there may be an restrictor on the right side of the receiver. This is mostly an stupid piece of folded metal above the magazine handle that prevents the selector from going in the lowest position. This can be simply cut of so that the selector lever can pass behind it, as you see in the picture:



After that you changed the restrictor device, you may wish to make an detent for the selector lever to move into. This could be made with a light mill cut, make sure you don't cut through the receiver wall! It could be made with a light ¼" drill, don't forget to not drill through, or simply cold punched using an aluminium or wood backing block inside the receiver. The location for the detent is under the existing detent, at the height of axis hole nr. 2 (see template).

If you don't have an "full auto" bolt carrier, you can buy one, or make one. There is a difference between the semi-auto carrier and the full-auto version, take a look:



The difference is the automatic sear trip cam. This cam is a small projecting surface as you see above. As you probably figured, an semi-auto rifle does not have this cam. The illustration above give you an dimension of the cam so that an welder might be able to make a build up on your semi-auto cam and an machinist to mill it to the dimensions. If you don't have access to a machine shop, you could jolly well just buy an full-auto carrier. But you may want to take a look at the following list:

- All Galil .223 rifles gave a semi-auto carrier.
- Almost all Valmet rifles have a full-auto carrier.
- All MAADI rifles have a full-auto carrier.
- All Hungarian have a full-auto carrier.
- All Yugoslave rifles have a semi-auto bolt carrier.
- All Chinese rifles have a semi-auto carrier.
- All South-African rifles have a full-auto carrier.
- All Galil .308 rifles cannot be converted using the AK47 full-auto replacement part sets.

Long live standardization ;-D.

Then you are ready for reassembly. First install the automatic sear and sear spring in the receiver by inserting the axis pin through these parts. Next using the famous "AK47 slave pinTM" assemble the trigger, disconnector and disconnector spring. Drop this assembly into the receiver and raise the automatic sear spring above the trigger axis pin hole and insert the trigger axis pin (this ejects the AK47 slave pin). Finally assemble the full auto hammer and hammer spring and insert them into the receiver. Use a screw driver to depress the automatic sear spring below the hammer axis pin hole. Now insert the hammer axis pin. Hook the tail end loops of the hammer spring over each side of the trigger, yes, you might want to wish for 3 hands with 7 fingers on each for this job, but actually, it is relatively easy, just try to find the right routine. Now you have an completely assembled full-auto lower receiver. The automatic sear spring retains all of the axis pins in the receiver.

After reassembly, you now have a select fire rifle. When the selector is placed in the upper position, the rifle is on safe, when it is placed in the lower position, it is semi-auto and the middle position is the full-auto rock&roll configuration.

Play save and legal!

Note on compatibility

Mostly all AK clone parts are interchangeable, exept the Galil .308 and the .223 Galil. Further, all AK47 parts can be placed in an .223 Galil except the gas piston, the gas tube and some stock parts and the selector lever.

If you have an Galil .308 this paper mostly wont apply, you need special .308 parts for that. Then it is nice to have some family in Israel ;-D.

Certain AKM rifles have a complex trigger-hammer mechanism mostly referred to as a "rate retarder" trigger. This is actually some kind of anti-bounce device for the light AKM receiver. If you have one of these devices you must have a trigger assembly, disconnect and hammer for it to function with the rest of the full auto parts. If you have all these parts, they might (tests showed that they actually work, but you never know sure) work in the full-auto conversion as just described. If you live in the US, you will notice that these are rare items.

A word of thanks to:

The CIA and the US Army for writing wonderful books on "how to build a rifle / silencer / machinegun from scratch" and many many more, wich gave me inspiration for this work.

A word about the author

Mr. Eltink also known as "Uncle Ro" is an 21 year old computer programmer, and during holidays, doing community volunteer work around the world.

Based on experiences mixed with compilations of other works, he has already written:

- The Paramilitary Commando: Structure and Tactics
- The Paramilitary Commando: Basic Training (methods and firearms)
- The Paramilitary Commando: Hand-to-Hand Fighting
- The Paramilitary Commando: Urban Warfare for Dummies
- Uncle Ro's Extreme Survival, an small work, partialy meant as an column
- The Paramilitary Commando: Train Troubles, specially written after experiences with train encounters.
- The AK47: Full Auto Conversion for Dummies

On the moment Uncle Ro' suffers from unemployment, so if you know a job for him as an programmer or something with security education, preferably in The Netherlands, it would be very appreciated. ;-D

E-mail him for comments (or a job-offer): royi_eltink_@hotmail.com

AK47_Parts.gif

