

Cost Breakdown

Credits to 50calshooter on Canadian Gun Nutz. Used with permission. Copyright 2012 50calshooter.

Norinco M14 Rebuild & Face Lift From The Ground Up... [Project Complete - 01/23/2012]

OK, so obviously I went above and beyond with upgrades so my costs will be skewed a bit. My overall plan was to build a Norc that's comparable to a Standard M1A, however I went a little nuts and bought some upgrade parts that aren't necessary for the comparison. Heres how it breaks down...

The Foundation

- Norinco Forged Receiver
- Norinco CL Barrel
- Norinco Forged OP Rod
- Norinco Forged Bolt

The Internals

- SA OP Rod Guide Assembly
- SA OP Rod Spring Guide
- SEI Pro Spring Kit
- SA Chromed Piston
- SA Spindle Valve Assembly
- SA Gas Cylinder Assembly
- SA Cylinder Lock
- SA Gas Cylinder Plug
- SA Muzzle Brake Assembly
- SA Castle Nut/Set Screw
- SA Clip Guide Assembly
- SA Roll Pins

The Sights

- SA NM Windage Knob Assembly
- SA Elevation Knob Assembly
- SA Sight Base Assembly
- SA Rear Sight Aperture
- SA Metal Sight Cover
- SEI Match Front Sight

The Chassis

- SA M1A Black Synthetic Stock
- SA Extended Recoil Pad
- SA Standard Handguard

The Finish

- Rough Sand w/Emery Cloth
- Glass Bead Blast
- Manganese Parkerize
- Arma-Coat Black

So the above represents a refinished Norc M14 with Springfield parts that IMO would directly match or beat the Springfield Armory Standard M1A in comparison. (Again, my opinion) The total cost to complete the above ran me approx **\$1,250** (rounding up)

Now, I've took this build one step further so the additional upgrades I added will obviously affect the price. With my upgrades it jumps my total all in build price to **\$1,675**

The Upgrades

- SA National Match Gas Cylinder (+\$50)
- SA National Match OP Rod Spring Guide (+\$25)
- Ultimak M8 Handguard Rail (+\$200)
- SEI Extended Mag Release (+\$35)
- SEI Extended Bolt Stop (+\$55)
- VP Picatinny Rail/Sling Mount (+\$60)

In the end I'm still ahead in terms of value for the money. My completed build with the upgrades IMO will now directly compete with the closest M1A model available. I will have also saved about 800 bucks plus any money I get for selling all the Norinco factory parts. I'm guna call this a win...

All parts pricing and price comparisons shown are rounded up to reflect taxes and shipping, YMMV but these costs will be pretty damn close

Step 1: Sand & Prep For Parkerizing

I completed the first step today which was sanding down the receiver and getting it ready for parkerizing. I used some metal sand paper (emery cloth) and a little elbow grease, I got all the rough edges and tooling marks out and shes baby smooth now. This is the most important step, the more detail, the better.







Step 2: Park & Arma-Coat

Well, I spent the better part of the day with Barrett over at Arma-Coat/Barrett Arms today. I gotta say, Barrett has himself a nice little operation for firearms refinishing. Simply put, his work is not only impressive but it's affordable. A big thanks to him for his efforts today, it's always nice to get something done in the same day.

Going into this, I new that the parkerizing on it's own may not give me the shade of black I wanted. The shade and consistency really depends on the type of metal. Barrett's own three step process, first step bead blast, second step parkerizing and third step Arma-coat is IMO a grade above all others. Having the parkerizing underneath the Arma-coat not only makes for a beautiful finish but it gives the metal some serious back-up protection. I think this system really does raise the bar in-terms of quality and durability. In the end I got the shade of black I was looking for and I'm blown away by the outcome, I never thought I'd ever see such a pretty Norinco.





Step 3: Mock Up & Parts Compatibility

(This step will be updated as parts come in)

Stock vs Receiver

So the first step in this section is stock fit. I purchased a Springfield Armory black fiberglass stock from a nice American fellow from M14forum.com, I actually lucked out because this gentlemen already did all the necessary trimming for the Chinese receiver. The barreled action fit very snug into the stock, I thought I was gonna break the trigger guard when I closed it, but it did lock down and pass the safety check. The only exterior trimming this guy did was lengthen the cutout on the top of the stock to the right of the receiver. I believe this little detail is what makes the stock fit so well to the Chinese receiver, it looks factory. I also added an extended recoil pad to the stock but I'm not 100% happy with it. The pad is pretty flimsy and it doesn't mount very solid, I may ditch it.

Note: The finish is not that glossy, I just applied a light film of grease to keep everything lubricated.





Extended Bolt Release

I got this piece today too, It's built by Smith Enterprises and appears to be of high quality. There is one minor problem though, the supplied roll pin is too tight inside the release. Now the spring doesn't have enough strength to fully manipulate the release. It will still work, it just works like a light switch now (on/off) thinking about it now it may be a little easier to operate this way, but we'll see. Worse case I take the pin out and squish the center of it down a bit or it may loosen up over time, for now I'll run with it. Overall I'm happy, it's alot easier to use then the factory piece and it does what it's supposed to do.



Extended Mag Release

Installation was pretty easy and took me about 10 minutes. The one problem I had with this piece is that the roll pins were originally manufactured for the M1A (different sizes) I still made it work but for others it may be best to use the NEA version as they're spec'd

for the larger Chinese pin. Overall this piece is a nice upgrade, there's alot more surface area to work with now and I find it helps make mag changes alot more smoother and quicker. Definitely worth the \$40 bucks.



Barrel vs Ultimak M8 Rail

OK this was not a simple install there was some modifying that needed to be done. The CanAm shorty barrels seem to have a thicker profile towards the end which is what caused an issue when mounting this rail. The M8 rail attaches directly to the barrel, there are 3 grooves in the rail that straddle the barrel and everything is held in place by 4 "saddle cap" pieces (1 in the front, 1 in the middle and 2 side by side in the rear) I had to bore out the forward mounting point to compensate for the thicker profile. I used a long shank carbide bur and ground away little by little, checking my progress along the way. It took me about 4 tries but I finally got it to mount properly.

Here's the final product, I was really surprised at how much metal I had to remove...





Here's a picture of it mounted to the barrel, notice the front strap is pretty much flush with the rail, this is basically the guide you follow, once it's flush your done. (Originally that strap stuck out a good 1/8" on each side) If you end up having to do this mod yourself, you will now notice that the rail will rock front to back on the barrel, this is normal. You have to tighten the very forward mount first, then the middle and then the rear. If you do it this way it will close the gap in the front between the stock and rail, it will also raise the rear of the rail to be flush with the top of the receiver (which will also properly gap the space between the rail and OP rod)



Heres the final product, I'm diggin' it, definitely a nice touch and it puts a modern spin on a classic rifle.





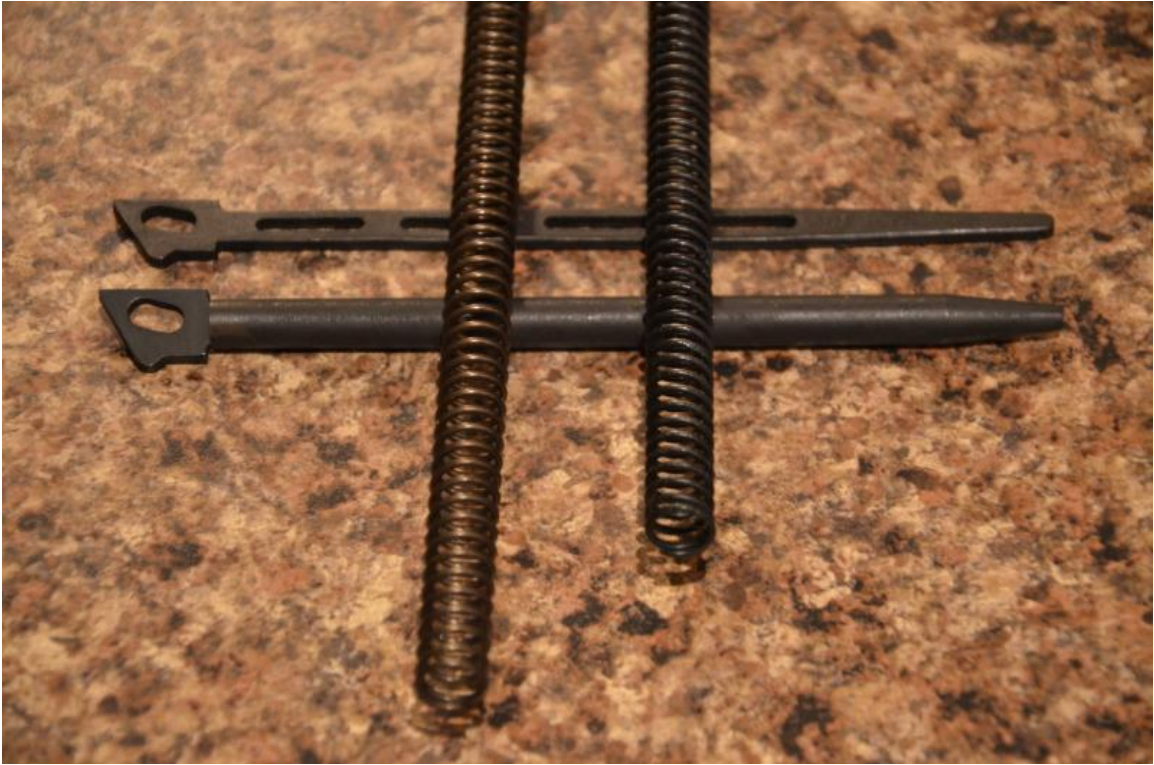
SA National Match Op Rod Spring Guide & Pro Spring Kit

More goodies came in the mail today, I got my spring guide and spring kit. Obviously the install was pretty straight forward and I'm seriously impressed at how much a difference

these two components made.

The pro spring has a slightly bigger OD then the Chinese one and it seems to be a little more stronger. It's also about 1.5" longer and it just has that quality feel and look. The NM spring guide is night and day different, it's tubular shaped and designed to take up the entire ID of the spring. Once inside it's fairly snug and the overall design is very heavy duty.





Before





After





You can clearly see what a difference these parts make and you can also see the difference between an American spring and a Chinese spring. In terms of function... First off, it adds a whole new level of strength and stability to the entire system, after the install the action seems more smooth and positive. The system now has a more stronger and durable feel and I've been told this also helps with accuracy (I can see why) for the \$75 (spring & guide) it seems like a worth while improvement.

Springfield Armory Op Rod Guide & Roll Pin

So one of the biggest problems I read about with the Norc M14 is Op Rod alignment and this gun in it's factory configuration was mis-aligned like the rest of them. Not only was there play in the guide piece side to side but there was also play front to back. To help solve these problems I installed a new SA guide with a new SA 1/8" roll pin. The new guide is noticeably tighter around the barrel and there is zero wiggle between the two parts, the roll pin is also damn near the same size as the barrel locking groove. With the guide now installed I notice the play front to back is now gone but the guide can still move about an 1/8" side to side. The assembly as a whole is alot more stronger and solid so initially I wasn't really worried about the movement. Now, with the install complete I noticed that between the NM Op Rod Spring Guide, SA Op Rod Guide and the SA 1/8" roll pin, the alignment issue was now gone. After racking the action and letting it slam forward a few times the Op Rod does not move, the entire assembly seems to stay in-line.



Springfield Armory Muzzle Brake & Smith Ent National Match Front Sight

So the SA muzzle brake kit I got from Brownells was quite the deal at about 80 bucks which also included the allen keys and castle nut wrench. I also bought a new SA castle

nut to go with it and I was surprised to find that the Chinese threads on the barrel match the threads on the SA nut. On top of this new brake I installed a new Smith Ent. NM sight, the difference in quality is night and day and overall I'm satisfied with the upgrade. The thinner sight post is a nice touch in that it won't completely cover the target at longer ranges.





Springfield Armory National Match Rear Sight & Clip Guide

So overall the stock Chinese rear sight was rough, the rear aperture hole was not even centered and I was not satisfied with the overall quality. In comes the SA NM sight and again the difference in quality is night and day. The clicks are more positive and the aperture is a lot more crisp and clean. As with all of the SA parts this sight just has that quality look and feel. I also installed a new clip guide, not much of a benefit to this swap but in keeping with the removal of the Chinese parts it was necessary. I can say that the new clip guide is a lot more smoother and better looking, the Chinese clip guide was really rough and beat up. The benefits were more cosmetic than anything.



Springfield Armory National Match Gas Cylinder, Piston & Plug

Finally got the gas cylinder on backorder from Brownells. As expected the fit and finish is first rate, no rough surfaces and it came parkerized jet black.

The only issue I found with replacing this piece was the lock, the thread pitch is different. (which was odd considering the thread pitch for the castle nut was the same) No big deal, I used the chinese lock and all is well, I didn't even need to shim! I did notice that the entire assembly fit alot tighter around the barrel, the whole unit feels alot more solid and heavy duty. I also replaced the gas plug and piston, which matched up nicely to the cylinder.

Everything functions as it should and I'm happy with the improvement.









The Final Product

So I got the last part in the mail today, the project is now complete.

Some people may think that the smaller parts may not have been worth replacing but I can say that the quality difference was noticeable, everything from roll pins to the castle nut were visually better looking and represented a higher level of quality. I am proud of the end result and I have the peace of mind knowing that every component worth replacing has been upgraded.

Holding this rifle in my hands the quality, fit & finish from day one to now is quite different. It's definitely M1A comparable now AND I saved about 1000 bucks! I think this project was a success...







