

# AR15 Maintenance

[part one of three]

Glen Zediker

**Combo cleaners have been getting better and better. Any of these three will pretty much destroy all manner of residues in a barrel. They will also hurt you and your insides. Safety glasses and latex gloves are wise for conscientious people. Be careful.**



**A rod guide protects your barrel and makes the otherwise difficult task of starting a patch through the upper receiver easy. This one has a solvent port plugged in to make that job easy too. Just stick the patch that far in, hit it with solvent, and then push it through. The rod is a coated Dewey. Only one I'll use.**

*ORIGIN: This is a jist of an article series I did for another magazine on maintenance for AR15s. I added a few things that I don't send to magazines due to space concerns.*

Barrels get dirty. Barrels need to be clean to shoot their best. Barrels also cost beacoup bucks. Barrels need to be cleaned right to last like they should. That last is so right: a lot of "worn out" barrels get that way through damage done in cleaning. Here's how to do it a right way. (I said "a" rather than "the" because few people really agree on all points.)

How often should a barrel be cleaned? I have answers only for myself, but if you're a competitive shooter I suggest cleaning every time you've been out with the rifle. That then answers the question. I'm going to put somewhere between 60-120 rounds through. If you are the sort of person who turns socks inside out to get another day (or week) from them, then you probably won't devote yourself to this whole barrel cleaning bidness in the first place.

Next thing is to get the goods together, and the first thing is to know what you are up against. There are three primary sources of grunge inside a fired bore. One is propellant residue. It's mostly carbon. Next is priming compound. It's mostly silica (salt, more or less). Then there's copper. That comes from bullet jackets. The carbon responds well to petroleum-based solvents. The copper won't respond at all to those. Copper fears ammonia. The priming compound won't respond to either, but, fortunately, it's usually just sitting there in little loose pieces and gets swept right out with the first patch or two run

through the bore. It doesn't really need to be dissolved to be effectively removed.

There are a ton and a half of different cleaners on the market. I can't say that all are good and I also can't say that there is one that beats all, and gets all. "Combo" cleaners that contain a good dose of carbon-cutting solvent along with something with an appetite for copper are, no surprise, the easiest way to do the best job. However! Who wants this to be easy? Ha. Actually I do. If you shoot often and, therefore, clean often, one of the mixes, such as Butch's Bore Shine, Montana Extreme, TM, or Shooter's Choice MC7, should be about all you need for routine barrel care. If you have a fouler for a barrel or, through neglect, might be required to get

Department of the Interior approval to remove the massive copper deposits inside your barrel, then we need some ammonia. Old-school copper solvents like Sweet's 7.62 still work as well as anything. Hoppe's No. 9 has its place as a "nitro" solvent (that means it's for carbon) and works well paired with a specialized copper solvent. If your bore is disgustingly blackened, get to Mr. Goodwrench and pick up some GM Top Engine Cleaner. It'll get carbon gone in a heartbeat.

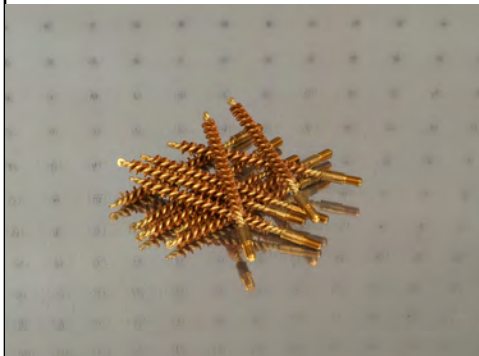
You did know this would end up being all about tools, right? Cleaning rod first. I use one-piece coated rods made by J. Dewey. There are others and some are good, but I stick with Dewey because it is a known commodity with me. Dewey rods are spring steel coated with Surlyn, which is a plastic also used as golf ball



**Here is a wrap jag and a stab jag. Stab jags work easiest. Use round patches with them. Wrap jags need square patches. I use 1-3/8 inch squares and 1-1/2 inch rounds. Don't run a dry patch through the bore. Always use a fresh patch that's wet with whichever chemical you're removing from the bore. Dry patches scratch. If you're mopping gorp, just use less chemical on the patch.**

**Here's how to buy brushes – by the bunches. They don't last long when you want them to work their best. The right brush is a bronze-bristle, copper-core. These are from Dewey.**

**Here's how to use it all — Thread on a brush after the rod is through the bore. Put the solution on it when it's free of the muzzle and then pull it through. And don't ever dip a brush or patch into the bottle of solvent! That just contaminates the supply. Get some solvent-proof squeeze bottles, or metal oil cans, and store the working supply thataway. Wipe the rod down every pass. A nylon brush works best for applying any solvent.**



hide. Coated rods cushion the inevitable contact between barrel and rod.

Since there's abrasive grunge inside the bore, that will get onto the rod. Just wipe off the rod with a rag as it's withdrawn, every pass. If you don't it can turn a rod into a rasp. There is never a reason to clean an AR15 from the muzzle end, so don't ever do it. Muzzle crown damage kills accuracy. So the next most important thing is a rod guide. Okay, it's not a bore guide. It guides the rod, not the bore. Obviously that's one of them

“things” with me. Sinclair makes, hands down, the best for AR15s and AR10s. It slips into the upper receiver where the bolt carrier goes and has an o-ring to seal up the chamber against backwash.

Next is something to put on the end of the rod. That's going to be brushes and patch jags. I use “wrap” jags, but the most simple is a “stab” jag, which has a sharp point that pierces the center of a patch. I like wrap jags for reasons that don't matter to this article (they are good at carrying coatings, such as moly). Either style works equally well for cleanup. What you don't want is a “loop” jag, which is the kind that looks like a big needle eye. They just don't work as well.

The best brushes are bronze-bristle, copper-core — never stainless steel. Nylon brushes have an important place in cleaning, but not as scrubbers. Replace metal brushes frequently (like every second or third use)

because they lose effectiveness if you don't. They are cheap and should be purchased by the baggie full. The bronze brushes are to clean out the black deposits. To use one, run the rod through the guide until it clears the muzzle, then thread on the brush, and then keep this system together until you're done scrubbing with it. Remove the brush when the rod is sticking through the muzzle and then withdraw the rod entirely. Reason? Don't run the brush through the rod guide.

The nylon brush does virtually no scrubbing but is the best at coating the chemicals on the bore. Put the rod through the guide and out the muzzle, thread on the nylon brush, and squirt the cleaning solution on the brush. Then pull it through the bore in three or four short motions to get the best saturation.

Regardless of the type of chemical cleaning solution you're using, let it do its work. That means let it be. Follow the manufacturer's cautions on the time it can be left in contact with the barrel, but a whole lot of scrubbing should never be necessary. It's kind of like letting a skillet soak instead of scouring it. Of course, the multi-dimensional sock wearers won't get that analogy either.

How do you know if the barrel is clean? The barrel is clean when the patch is clean. Always leave something in the bore to protect it. A patch of very light oil, Hoppe's No. 9, or Kroil will keep corrosive evils at bay.

There aren't really any cautions unique to AR15s. They're actually very easy to clean and, since they are metal, we don't have to worry much about solvent damage to exterior parts, epoxy bedding, or stock finish. Still, I cover the stock.

One last, and pay attention — Copper cleaner takes time to work, but little effort. Brushing it just destroys brushes (they will smoke). Take time to read and follow recommendations on the length of time any cleaner should be left in a bore. Too long can hurt the steel. Don't think you know more than the chemists who research this stuff.



This set up always makes me feel like a working mechanic, and that's a good feeling. Sinclair makes the diggingest deals such as this cleaning cradle especially for AR15s. Also shown in this photo are Sinclair's cover to keep solvents from contacting the stock, a link that holds upper and lower receivers apart at exactly the right amount, and a quarter's worth of shop rag to wipe the rod down each and every pass through.



## SOURCES

Sinclair International  
(260) 493-1858  
[www.sinclairintl.com](http://www.sinclairintl.com)

*You're not done yet. Next time we'll look at how to get the rest of the rifle clean and keep it gimming.*

RB-17 is a little-known but effective copper cleaner. I've always had good luck with it but tend to use more mainstream products like Shooter's Choice Copper Solvent due mostly to availability. RB-17 is made from horse urine. Smells like it too. It's also really good at removing lead from pistol barrels. It also won't hurt you.

