# AR15 Maintenance

*[part two of three]*

Glen Zediker

**Chambers are often-neglected frequent contributors to function problems (related). Get it clean, and do it each time the barrel is cleaned. Do all this each time the barrel is cleaned and function problems and parts wear (also related) decline dramatically.**

*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.*

## Clean It Up

Since we shined up the barrel last time, there's one more nearby place that needs attention before that job is full done. Don't forget the chamber! Any and all semi-automatic firearms need a clean chamber to operate like we want. I use a coated pistol rod with a .357 caliber brush on its end to do this job, followed by a patch wrapped around the brush to mop out the gorp. Use only petroleum-based solvents for this job because they will clean the only residue you'll find in the chamber.

**Cleaning out the locking lug recesses used to require creativity, but the right tools can make you feel like a dadburn dentist with all the cool swabs some have seen so fit to provide us with. Makes a previously graceless job feel like Bob Fosse choreographed it. The tool in the center is from Sinclair.**

The gas system needs little to no maintenance and the gas tube never needs it. Don't try to clean it. Gunsmiths will laugh right at you if they have to remove a stuck pipe cleaner. The residue from the gas system is another topic. Carbon deposits build more quickly than most folks calculate, and they can be a bear to remove. This, yes, is compounded by my later suggestion of a heavily lubed rifle, but the lube still protects the metal from itself, and that's its job.

Carbon comes off one of maybe three good ways. First is a long soak in a strong petroleum-based bore cleaner. Second is a dousing and a scrubbing with a stronger cleaner. Third is with an abrasive.

There is nothing in the world wrong with rubbing or scraping away carbon, as long, of course, as the metal underneath the carbon layer isn't getting abused. Crocus cloth works well. You'll see carbon on the firing pin collar and it will collect inside the carrier key (that's the part on the bolt carrier that intercepts the gas tube). I use a .17 caliber bronze brush followed by a de-fuzzed pipe cleaner (just rub it through your fingers a few times) to get this spot.

The most stubborn carbonized area is inside the bolt carrier where the extreme back end of the bolt goes. It's difficult to remove all the deposits here and after about 1000 rounds of neglect or 2500 rounds following half-hearted efforts the rifle will usually start to stop. Mark Brown makes a way-cool scraping tool that gets all of it gone with no solvent. I tell everyone to get one, you too. Use it each time you clean and no problems. Don't fear. We all used drill bits to clean M14 gas systems; if the bit was the right dimension (exactly the right dimension) there was zero harm done to the parts metal. This scraper won't hurt a thing.

Get all the brass chips and plain old grunge out of where ever you might find it, and a good few places to look are around the ejector, under the extractor, and in the firing pin hole. A right handy tool for the first two is a small flat blade screwdriver backed up by a barrel cleaning patch. Wipe down the bolt body, cam pin, and bolt carrier exterior. All the grunge should come away as long as you've been keeping these parts sufficiently lubricated before use.

Swab out the upper receiver. I use a defuzzed shotgun barrel swab. Take the buffer out and wipe the tube and the buffer hisself, put beaucoups oil on the buffer and put it all back together.


**This is strong stuff. It will remove carbon. Just don't leave metal soaking in it. It also works well in a really badly fouled barrel. Get at your local Chevy dealer. Keep it in a squirt bottle.**

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**Gas rings fail and also wear. They may or may not get to a failure stage before they have worn sufficiently to warrant replacement, and, hey, here's a good idea from that idea: just replace them every 1500 rounds. They're cheap and easy to change. Watch for cam pin wear. This part can get hammered shooting a lot of heavy loads. The bolt stop gets almost continual use by the High Power shooter who's single-loading the majority of his rounds.**

## Oil It Down

Keep the daggone thing lubed. Too much spooge is probably just about right, and way on better than too little. I see a lot of folks who seem determined to lube the fewest parts on any gun with the least amount of oil. I wonder if they have ever tried to find out just how little oil needs to be in the crankcase of a car to keep its engine from seizing. I think not. If someone is storing an AR15 for lasses-faire use, or prepping it for field use, I can understand why they wouldn't want a wet gun. Lube collects dust and even the best ones can get a little gummy after too much time. However! If you are a competitive shooter, or anyone who's going to fire more than a few rounds at the range, you are running a machine much in the same way other folks run racing equipment.

Before a match, I pull the bolt carrier apart and lube the fool out of it. I smear sticky grease all around inside the lower receiver. I douse the trigger assembly with oil and make sure my Moly Slide is on the sear face and hammer hook. I put the whole slippery mess back together and shoot my events. Then I clean it all off and out when I'm done and home. The gun sits that way until it's time to shoot again.

Lubes to use? There is no wonder oil, or if there is I haven't left any of it on long enough to verify the superiority of any one brand or additive. I recommend Dri-Slide for those who want to fire their rifles in desert sandstorms. I use grease in a few select, but I think very necessary, areas. I never recommend grease for anyone who's not going to shoot their rifle straight away. Too much of a heavy lube left for an extended time means the lube just gets heavier.

The rest of the moving pieces on the rifle need a shot of oil on occasion. That's not saying much concrete, but I check over all the pieces-parts, like the magazine catch and bolt stop assemblies, and drip a drop if anything seems like it could use it. Lubing all the latches and buttons every time is just too much oil. We talked about this in another article, but unless you're using chrome silicon springs, yank and replace after 2500 rounds to maintain "as new" performance from them.

**This is an indispensable Mark Brown tool. It's a scraper that gets the carbon out from the bolt carrier. You need it; Brownell's has it.**

Lube slows wear. Wear increases tolerances. Look at parts, say that, and see what they say back. I lube rear sight parts like wind and elevation threads. Anywhere there is a piece of metal touching another piece of metal and you don't want them changing too much, well then put some lube there. Mostly, it's really important that these parts are given a good coat of a good lube during assembly. Here is where oil additives can help. After time, though, it needs to be redone.


**This pin goes in and out a lot. Make sure it's greased, with moly preferably. Anyone worrying about upper to lower receiver fit should at least do what he can to circumvent expanding the diameter of the hole, and this goes treble for those who install the little "wedgie" to increase tension against the pin.**

*For spare parts you might want to keep handy a complete bolt carrier assembly. I baggie one and put it in my tool box. Its bolt headspace has, of course, been verified. That's the ticket out of most problems that could be reasonably fixed on a firing line.*

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**Running a race car means lube, clean, relube, clean, relube – it never ends. Running a race gun means the same. Just wipe it all out when you're done shooting and put it all back on right before you go shooting again. I do it at the range, if possible, as near to the time I'll fire my first event. I've liked these lubes in my AR15s. I'm not adverse to trying different ones, though, because they won't stay on for long. I use the grease for underside of the bolt carrier (rails), on the cam pin, on the bolt locking lugs, on the bolt carrier exterior, and on the top of the hammer. The moly grease goes on the trigger engagement surfaces. The engine assembly lube goes on the bolt exterior. The oil goes everywhere else. I also grease the insides of my lower receiver to help keep dirt and metal bits away from the functioning parts.**


## SOURCES

Sinclair International
(260) 493-1858
www.sinclairintl.com

Brownell's
800-741-0015
brownells.com

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