

Moly-Coat Barrel Cleaning

David Tubb

[David Tubb's Moly Coatings Inc. is a commercial bullet coating facility that provides Sierra Bullets with all its commercially offered moly coated bullets.]

INITIAL CLEANING

I am assuming that this is the first time you have used Sierra moly coated bullets in your firearm. I would start by thoroughly cleaning the bore with a powerful copper solvent such as Sweet's 7.62 Solvent or Hoppes Benchrest, or, if you prefer, an abrasive paste such as JB Bore Compound. Our purpose in this is to remove all of the accumulated bullet jacket fouling from the firearm bore before starting to use moly coated bullets.

I prefer Sweet's and use a one caliber oversize brass brush (use a 7mm brush for 6.5mm caliber, for instance) that I liberally drench with solvent every other time the brush protrudes from the end of the barrel. I have brushed some barrels 60-plus times to remove the fouling. Finish with 2 or 3 dry patches. By cleaning with this method initially you have emptied the jacket and powder fouling from the heat stress cracks (caused by firing) and tool marks inside the barrel; it will now take several (possibly 10 or more) shots to recondition or re-season the bore. In other words, the rifle probably won't group too well with whichever bullet you feed it (moly coated or not) until several shot have been fired.

METHODS

After firing moly coated bullets, I then use two different cleaning methods based on the caliber.

Method 1: For efficient cartridges such as .308, .223, .30-06, and others where jacket fouling is normally not as critical as it is in large, less efficient rounds (7mm STW for example), I clean my barrel from one-half to one-third as often as I would using uncoated bullets. For example, a barrel I normally would want to clean every 100 rounds will go to 200-300 rounds when shooting moly coated bullets. I am using a nylon brush liberally doused with either Hoppe's #9, Kroil, or Shooter's Choice MC7, normally 15-20 strokes with the brush and couple of wet patches to finish. This method normally has the first and maybe second shots not going into the group, but groups well from then on. Be advised that I am using match grade barrels which are stress relieved and don't have group shifts from firing (barrel heating).

Method 2: For less efficient cartridges such as 7mm Remington Magnum, .22 Cheetah, 6mm-284, or others where jacket fouling can affect accuracy in just a few rounds (under 20), I am cleaning half as often as I did with uncoated bullets. I again am using Shooter's Choice or Hoppes with a good fitting brass brush liberally coated with the solvent. Again, normally 15-20 strokes applying solvent each time the rod protrudes from the muzzle. If you shoot the rifle to the point that is is throwing shots from fouling you may have to repeat the 15-20 brush strokes with solvent. Again, the first one or two will not be in the group -- which is the same occurrence I would experience using non-coated bullets.

FOLLOW-UP

After cleaning the barrel using either method, I run a patch containing a small amount of moly grease (such as Neco Moly-Slide) through the bore several times. The idea is to burnish some of the moly onto the bore surface. This also helps the firearm's bore (corrosion protection) if stored for longer a period of time.

I think that if you follow these suggestions you'll find that your barrel is actually easier to clean now that you're shooting moly coated bullets than it was before when you were shooting uncoated bullets.



ZEDIKER NOTE:

Have to pitch in my two cents on this: there are rumors afloat that moly coated bores (coated with firing residue) will corrode if stored uncleaned for any length of time. Won't say it can't (couldn't) happen, but will say it hasn't happened to me, David, or anyone else "we" know. I left a fired rifle up for several (many) months in Mississippi and its bore is just as bright and shiny, or was after I cleaned it, as it ever was before moly bullets. If you clean the rifle and follow David's suggestions on conditioning the bore with some moly

What I use to clean up after moly coating is primarily JB Bore Compound. The Kroil augments the abrasive action of the JB by creeping in and under the fouling left in the barrel. Soak the Kroil for a few minutes and then commence the JB. Easy. It works and will not, if used as directed, harm your barrel. Plus, there's patently no chance for any sort of corrosive action to take place in a barrel following use of this cleaning method.

grease rub-on before storing, I can't imagine anything bad ever happening.

Also for what it's worth: I have taken to cleaning the rifle barrel each time I shoot it, just like "before," if it's going to then be put up for a spell. I can go a few hundred rounds without seeing any accuracy deterioration, and that really comes in handy when I'll be to a match for a few days or go to the range a few days in a row. Then there's no need to clean until you're "through," but I am more concerned with the chamber and general dirtiness of my rifle beyond just the condition of the bore. But as long as I have out all the stuff, may as well use it: it doesn't take much longer to clean the barrel, especially with the paste.

The cleaning process I follow now is a combination of Kroil and JB Bore Compound. I use the Kroil to get the initial gunk out of the bore (firing residue) and then the JB to take 'er down to the steel. I've used some Liquizac from Kincaid's Customs for a post-cleaning/pre-shooting treatment and it seems to work fine; Moly-Slide is just as good and having it on hand means there's one less (other) thing to buy. Chamber cleaning can be done with Kroil or Hoppe's #9.

And clean the chamber every time back from the range whether you clean the bore or not! This is especially important for semi-automatic rifles. The chamber will get just as dirty as it ever did, moly bullets or not, and needs maintenance to keep the rifle running.

To me, the reason to use moly is because it gives better performance, and it does. Big time. If you ever thought you'd never have to clean again, well, come on.

-- Glen Zediker