GUN CLEANING

Cleaning the Modern Centerfire Rifle

This does not mean spraying CRC in one or the other of your barrels respective orifices and then firing the weapon.

Sounds incredible? I would like a couple of dollars for the number of times I have heard this statement in the last ten years. I believe this and many other weird and wonderful cleaning theories come through

As a lot of the people who live by these theories are often good hunters and marksmen and genuinely want to look after their equipment. First of all one needs to understand what happens to the interior of your rifle barrel each time



you pull the trigger. A number of by-products of the cartridge powders detonation deposit themselves on the rifling (carbon, Powder residue/fouling) Being the major culprits.

There are lesser evils such as moly fouling but these are generally easily dealt with in the steps listed below. But the single worst of all the types of fouling is copper fouling. This is caused from the jacket material of the projectile adhering to the interior of the barrel as it makes its way through the bore. Jacket fouling can often be seen with a light as orange or cooper colored strips running with the rifling at the muzzle end of your rifle. But what cant be seen is the copper fouling immediately in front of the throat area of you rifle. The fouling will tend to be much heavier in this area. This area can easily be missed, as you can not see jacket fouling building up here.

All jacket fouling is not easily removed and the longer it is left untouched and if the weapon keeps being shot on the fouling that remained in the barrel from the last (shell we say) incomplete cleaning. The harder this fouling is to remove. The only problem with this sort of fouling is left long enough it can affect rifle accuracy substantially but worst still it will shorten barrel life by as much as 70% depending on the caliber. The smaller and faster the cartridge involved the quicker fouling can build up but many of todayís over-bored and magnum cartridges are severe cooper foulers that can hold there head up as high as many hot rod 22 cartridges.

Equipment Needed to Clean Center Fire Rifles

1. I prefer a one piece S/S or safety coated cleaning rod. Must be the correct size for the bore diameter you are cleaning. To qualify this statement rods are made to clean only a certain range of calibers. (depending on the manufacturer) a 22 caliber rod will clean 22 through to 243 bore diameter the next size rod will be made to clean 25 through to 6.5 & 270 bore diameter the next step you will see will generally be marked for 30 cal +. If you use a rod to small for the bore you are cleaning you will get the rod flexing in its mid section as you push it through the bore and slapping the bore. As you can imagine this is undesirable. So unfortunately you will not be able to buy one 22 caliber rod to clean your entire stable of firearms.

- **2.** For a bolt action rifle, a bore guide is very important as it aligns the rod correctly to the bore. Which can stop the rod as it is moved back and forth eroding the chamber and throat area of your rifle. A bore guide fitted takes the place of your bolt and your rod travels through the bore guide. It also serves to keep excess solvent from running back into magazine well and king screw holes corroding & softening wood that the action is bedded on. For Semi Auto rifles and lever or Pump actions you are forced to clean from the muzzle end of your rifle this is an area of your fire arm that needs particular care when cleaning as you can very easily damage the crown on your firearm. If damaged this is simply the very last message a projectile gets before it is sent on its few hundredth of at second flight as you can imagine a small nick in the crown of your rifle could drastically influence a projectile. The only piece of equipment available to you is a brass crown or muzzle guide. This is a much cheaper option than having a gunsmith re-crown your barrel.
- **3.** Good quality brass spear tipped jag and patches lots of them they are cheap.
- **4.** Copper bronze brushes.
- **5.** Copper solvent in conjunction with a good old fashion scrubbing with the solvent and bronze brush is a very important product it causes a chemical reaction that melts the copper fouling. Different copper solvents are needed to clean Moly or Stainless barrels. All will clean crome moly barrels. Be careful you need to make sure the solvent that you choose for a Stainless barrel have no more than 1-3% ammonia in its make up. If not it will etch out the free machining lead that is in the manufacture of stainless steel barrels making it very porous. There after it will copper foul much faster than normal.
- **6.** JB Cleaning Paste (Looks like Waikato Mud)
- **7.** Gun vise (This is a luxury Item but it will save a lot of extra work.)
 There are a number of ways but this is how I clean my rifles. I have come from a target shooting and varminting background so you might or might not clean your old 308 or 270 this thoroughly. Experience tells me it could probably do with a lot better clean than it has been getting.
- Step 1 Placing rifle in gun vise if you have one remove bolt and replace with bore guide.
- **Step 2** Put one solvent soaked patch on jag and pass through barrel once do not pull that same patch back through the barrel repeat this process.
- **Step 3** Removing jag fit your bronze brush to rod and dip in solvent pass brush back and forth through barrel 30 full strokes. Being careful to push & pull the rod in line with bore.
- **Step 4** Remove brush and fit jag to cleaning rod pass two or three patches through bore until they emerge clean from the barrel. (Foot note when you have removed bronze brush from rod running it under very hot water for 5-10 of seconds will extend its life considerably as the solvent is attacking the brush as it is made copper also.)
- **Step 5** Pass two solvent soaked patches through bore. (Go and make a cup of tea mow the lawns earn some brownie points in one way or another. Leave it for an hour or two.)

Step 6 Pass a clean patch through barrel you will notice a green or blue color on the patch this is the copper residue reacting with the solvent.

Step 7 Wrap an older brush in a piece of 4x2 cleaning cloth and cover with JB Cleaning Paste pass this through barrel 20 times. If fouling is severe you can short stroke this brush in the problem areas.

Step 8 Replace JB brush with jag and push clean patches through barrel until they emerge clean. Keep the brush with JB Paste in a tube or plastic bag you will use it many more times in the future.

Step 9 Pass two solvent soaked patches through bore then repeat with clean patches until they emerge clean.

Step 10 Keep repeating steps 1-9 until when you leave fresh solvent in the barrel for as long as you practically can and then pass a clean patch through barrel and it emerges from the barrel the color of new solvent with no green/blue. Your barrel is now free of powder and copper fouling.

Do not forget to clean chamber. You will need to remove bore guide to do this. Lightly oil barrel until next time. This is probably more than you would do for most deer stalking rifles. But it is what should be done for all varmint/target and magnum rifles if you would like them to keep shooting accurately and extend barrel life as much as possible. Only you can decide on the level of maintenance you are prepared to do but you have probably invested no small sum of money in your rig it is not that much work to substantially extend barrel life.

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P.S. It is possible to loose a lot of brownie points if you spill half a bottle of copper solvent on the spare bed so this is best avoided!!!

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