

Recommended Care and Cleaning Procedures

Do's/Don'ts

- Use a quality cleaning rod and bore guide. This is a must to properly clean and protect your barrel. A 22 cal., 44" one piece coated or carbon fiber cleaning rod will be capable of cleaning most rifles. A rod guide that fits both action raceway and cleaning rod should be used to prevent the cleaning rod from touching the bore.
- A brush guide of appropriate caliber should be used to prevent cleaning rod from falling when brush or patch exits muzzle.
- Always use clean quality patches and brushes. Separate brushes should be used for different solvents. Clean brushes after every use with alcohol
- A bolt lug and raceway cleaning kit should also be used to properly clean action
- Do not impact muzzle crown with jags, brushes, or cleaning rod. Always pull back cleaning rod slowly as it re-enters the muzzle. Your muzzle crown plays a very important part in your rifles accuracy. Protect it!
- Do not leave high ammonia based solvents in bore longer than 15 minutes
- Always thoroughly clean out each solvent before another is used

Barrel Break-in

The purpose of barrel break in is to burnish off any burrs that lead to excessive copper fouling. I recommend doing the one shot and clean method until copper fouling is noticeably less. This could take as little as 5 rounds but may take up to 25 depending on barrel. Once copper fouling is reduced shoot 3 to 6 shots and clean for the next 20 to 24 rounds. Chrome moly barrels generally take more rounds then stainless due to it being more abrasive resistant.

Cleaning procedure

- 1. Position your rifle so muzzle has a downward slope to prevent solvents from flowing back into action.
- 2. Attack the carbon first. Montana X-treme Bore Solvent or Butches Bore Shine works well for this task. Others may work just as well or better, that's for you to decide. These two will also remove copper but not always all of it. With bore guide installed, push several appropriate sized patches with a jag through bore with your chosen solvent applied to each, making sure not to impact crown when pulling cleaning rod back through. If you have time and are patient enough wait fifteen minutes for solvent to break down the carbon and dissolve the copper. Using a bronze brush soaked with the same solvent, brush bore 10 to 20 times never pulling the brush back through the bore. I prefer to always remove the brush at muzzle end, pull out cleaning rod and re-attach. Whatever you decide to do, do not try and

reverse a bronze brush while in the bore. The amount of brushing depends on powder and cartridge. Go until there is no change in resistance through the whole length of the bore.

- 3. Clean out by pushing through dry patches until they come out clean. Follow by a couple patches with alcohol applied. Remove rod guide. Using a short fixed rod with a loop style/slotted jag and a 3" dry patch clean out chamber. Follow dry patch with a 3" patch with alcohol. Just get it wet not soaked, you don't want alcohol squeezing out into action. Twist into the neck area well pull out patch to ejection port and pull patch forward and twist it. Trying to keep patch forward re-insert it into chamber while having a snug fit to clean chamber walls and shoulder. Repeat as necessary until a wet patch with alcohol comes out clean.
- 4. Inspect from the muzzle end to see if any copper remains. A Q-tip inserted into the muzzle may help highlight copper presence. If no copper remains proceed to step 6. If there is copper still present reinsert bore guide and install jag on cleaning rod push through a dry patch to remove any alcohol remaining. Then push through two patches soaked with copper solvent to coat bore. Sweet 7.62 works well. Attach a nylon brush. Soak it with copper solvent and brush back and forth 10 to 20 times. Always pull brush back slowly through muzzle making sure you are not impacting the crown on the way back. Push dry patches through until they come out clean followed by a couple patches with alcohol. Remove bore guide swab out chamber as described in step 3. With copper solvents you want to make sure you get it out completely and do not leave it in bore longer than 15 minutes.
- 5. Inspect muzzle end to make sure copper has been removed. If not repeat step 4.
- 6. With bore guide installed push through a dry patch followed by two wet patches of your chosen oil. Montana X-treme Bore Conditioner works well. With this oil fouling shots are minimal and usually right in the group. Follow oil with two dry patches. Swab bore with a dry 3" patch to get out any excess oil that may have squeezed out.
- 7. Using bolt lug and raceway cleaning kit, clean out action with a little bit of alcohol applied. Lightly relube with oil, wipe out excess with a dry swap. Clean bolt with patch and alcohol. Bolt face with Q-tip. Lightly re-oil, wipe off excess. Lightly lube back of lugs with bolt grease.

This is one method of many and has proven to work for us. Whatever your methods are the key is to get all the carbon and copper out while not damaging your barrel from bad practices, poor equipment, or over cleaning. Always follow the directions for the solvent you are using and never go beyond recommended dwell time. And most important is to protect your muzzle crown, throat, and lands.

Any questions or help feel free to call or email

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