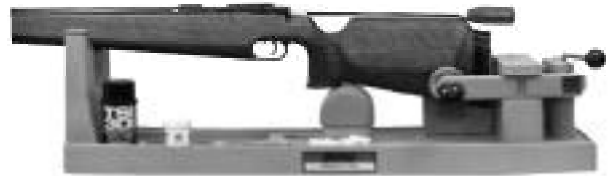


How to Properly Clean a Smallbore Rifle

Although cleaning a smallbore rifle (or pistol) is a fairly simple task, it does require some work. In fact, elbow grease is the primary ingredient for the job.

Items required are:

1. A place to support the rifle:
 - A. A vise designed for the job such as the **Tipton**.
 - B. A sturdy vise on a workbench with padded jaws.
 - C. A sturdy table.
2. A cleaning rod guide.
3. A one piece steel cleaning rod, preferably coated such as the **Dewey**.
4. A brass or bronze brush.
5. A supply of patches.
6. A bore cleaner/solvent. We use TSI-301 in our shop.
7. A toothbrush or one of the commercial products that are similar.
8. A dental pick or similar tool.
9. A source of compressed air:
 - A. An air compressor with hose and blow gun.
 - B. Canned air.



Using a vise such as the Tipton helps keep your gun in place while cleaning. It also provides storage for your cleaning equipment.

To begin the job:

1. Place the rifle in or on your support so that the muzzle is lower than the breech.
2. Remove the bolt from the rifle.

This allows access to the breech and renders the gun absolutely safe. **(You should never clean a precision target rifle from the muzzle).**
3. While you have the bolt in your hand, you might as well clean it.
 - A. Spray or otherwise wet the bolt face with your solvent.
 - B. Using your toothbrush, brush the face making sure you get the crud out from under the extractors.
 - C. Spray it again and then blow it off with your air source.
 - D. Wipe the entire bolt with a light lube. We use TSI-301 because it is a lube as well as a solvent.
 - E. Occasionally disassemble the entire bolt using the instructions in your owners manual. Clean and lube all parts with the light lube with one exception. The cocking cam requires a small amount of high pressure grease. We use a Moly-based grease.
 - F. Reassemble your bolt and set it aside.
4. Install your cleaning rod guide in place of the bolt. **(If you do not have a cleaning rod guide or a cleaning rod as described above, I recommend you leave your bore dirty. You can do more damage than good.)**
5. Put a patch on your cleaning rod and wet it with your solvent.
 6. Push it through the bore and remove it when it appears at the muzzle. Repeat two or three times.
 7. Install your brush on your rod and wet it with solvent.
 8. Push it all the way through the bore and then pull it all the way back. Repeat 10 to 20 times, occasionally rewetting the brush.
 9. Remove the brush and replace it with a patch. Wet the patch with solvent.
 10. Push it through the bore and remove it when it appears at the muzzle. Repeat two or three times.
 11. Put a dry patch on your rod.
 12. Push it through the bore and remove it when it appears at the muzzle. Repeat two or three times.
 13. Examine the last patch. It should be almost clean with possibly some very light gray streaks. If there are heavy gray streaks, go back to step 5 and repeat steps 5 through 13 until you do get a clean patch. (This is where all the elbow grease is needed). When you are finished to your satisfaction, wipe the muzzle as it will have collected a large amount of the stuff from the inside of the barrel.
14. Remove your cleaning rod guide and using your dental pick, clean out the extractor grooves in the barrel and any other crud from the loading port area. Wipe the area thoroughly with a rag or patch.



Always use a bore guide when cleaning your rifle.

15. Wet a patch or clean rag with your light lube and wipe the entire barrel and receiver. This will lube it where necessary and prevent corrosion for normal use.

16. Occasional cleaning and lube are required for both your rear sight and trigger. **(It is very important that you use no tools around either one as they are very delicate instruments).**

A. Remove your barreled action from the stock. This will not hurt anything if the rifle is properly bedded.

B. Remove any lenses or filters installed in your sight. Spray the sight and trigger with a solvent/lube such as TSI-301.

C. Use your air source and blow them both off. That is all that is necessary for routine cleaning.

D. Inspect your trigger. There should be a small amount of grease where the catch link bears on the catch (**Anschütz** terminology but similar on all target triggers). If the grease has been removed by cleaning, replace it.

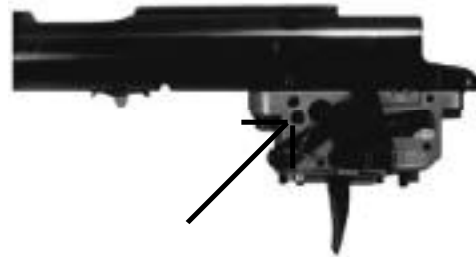
17. If your gun is to be exposed to severe conditions such as rain at Perry, wipe all exterior metal surfaces with **RIG** grease. **RIG** will offer the best protection from corrosion. It is also excellent protection for long-term storage. If you do get your gun wet, disassemble it as completely as possible, dry all parts and recoat everything with **RIG**. Make sure that the wood is completely dry before putting the barreled action back in the stock.

18. Reassemble your gun and shoot some more tens.

Some other thoughts:

Cleaning frequency varies from gun to gun. There are rifles that require cleaning between stages in a match to maintain peak accuracy and others can go several hundred rounds before accuracy drops off. Your experience with your barrel should dictate your cleaning schedule. I would certainly be sure my gun was clean before each day of a match.

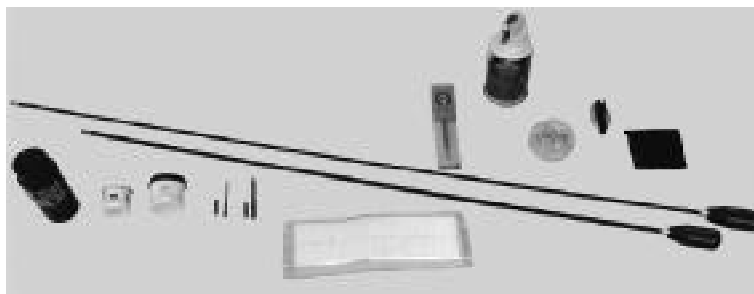
Shooters commonly try to extend brush life too far. Throw the old brush away often. Brushes are inexpensive and for good scrubbing action should be tight in the bore. Also a normal brass or bronze brush **will not harm** your bore. Some barrel makers prohibit the use of stainless brushes in their barrels.



Put a small amount of grease on your trigger where the catch link bears on the catch (arrow indicates the place).

Cleaning Supplies

Proper cleaning of a target rifle will have a very positive effect on the accuracy and life of the rifle. Some of the rules to follow are: **always** clean from the breech; **always** use a cleaning rod guide; **always** use a one-piece steel cleaning rod.



Assorted Cleaning Supplies