



## BREAK-IN PROCEDURE FOR NEW RIFLE BARRELS

1. First 5-10 shots (most important) - thoroughly clean barrel after each shot. Now the barrel should be mostly broken in, but if it is still fouling more than normal, continue on to the next two steps.
2. Next 6-12 rounds - thoroughly clean barrel after every 3 shots.
3. Next 10-15 rounds - thoroughly clean barrel after every 5 shots.
4. On the 3<sup>rd</sup> 10<sup>th</sup> and 30<sup>th</sup> shot, re-clean the bore with copper remover, then lightly scrub it with JB or IOSSO bore paste.

NOTE: Don't use moly coated bullets during break in!!

The whole idea here is to get the surface pores of the metal in the throat and the bore as thoroughly clean as possible after each shot so that on each succeeding shot, the bullet doesn't pack old fouling into the pores and add more fouling on top, making it much harder to clean later. When the barrel is broken in properly, the surface pores are smoothed out and won't pack with and attract fouling like they will at first. The main part of the barrel that needs to be broken in is the freshly cut throat, which has a microscopically "rough" surface with sharp edges from the chambering reamer, this needs to get smoothed out during the break-in process to keep the barrel from fouling.

Use a top quality one piece cleaning rod and a cleaning rod guide to keep from damaging the chamber, throat and bore. Use good tight fitting bronze bore brushes and replace them often. Cleaning rods do more damage to bores than most people realize, so be very cautious when cleaning your barrel.

Wet patch the bore with a good powder solvent like Shooters Choice MC #7, Butch's Bore Shine, Montana Extreme, etc. Brush the bore 20-25 strokes with a solvent saturated bore brush. Now run 2 wet patches through the bore, followed by 3 dry patches (patch the chamber dry also) - then take your next shot. Factory barrels will often take a lot more shots to break-in than good customs will.

I recommend using copper remover and JB/IOSSO 2-3 times during the break-in process to help stay ahead of the copper and powder fouling (I do it after the 3<sup>rd</sup> shot, 10<sup>th</sup> shot, and 30<sup>th</sup> shot - then every 100-200 rounds after that).

Clean the bore with regular solvent and patch it dry. Then after the bore is dry, run several wet patches of a good copper remover solvent through the bore (they will turn very blue if copper is still present). You may want to let the solvent soak a little at first to help remove the copper fouling. I like to

brush the bore 20-25 strokes with this copper solvent to help it work faster and cut down the soaking time, but remember that these solvents will cause the brush to dissolve and you will keep getting blue patches from the brush as well as copper fouling from the barrel. Now wet patch the bore, and leave it wet for the next step.

Next, scrub the bore lightly (especially in the first 3-6" ahead of the chamber where most of the powder fouling will be) with an abrasive bore cleaner like JB or IOSSO. Do this with a snug fitting patch on a jag, or with a nylon brush coated with the bore paste. Stroke the bore ahead of the chamber for 10-20 strokes, then full length for 5-10 strokes. Use bore solvent to clean the bore paste out, dry patch the chamber and bore and you are ready for your next shot. Use these abrasives very sparingly so you won't cause any problems in your bore.

By the time you have the first 5-10 shots and cleanings done, the barrel should be breaking in nicely, you will notice a big reduction in fouling and it will be cleaning much easier than at first. Now, if needed, you may shoot a few 3 and 5 shot groups and clean after each group to finish the break in procedure.

I feel it is worth the time and trouble to break the barrel in correctly! When a barrel is broken in properly, it will clean easier, foul less, and shoot better. Ideally it is recommended to clean after every 20-30 rounds or so with a good bore solvent, and every 100-200 rounds with the copper solvent—more often if it is fouling a lot. Copper solvent should only be used when needed to control excess copper fouling. Also use some JB/IOSSO occasionally if the barrel is starting to foul quicker or accuracy is deteriorating. This will maintain peak accuracy and reduce fouling, especially with high velocity, high pressure cartridges.