



BARREL BREAK-IN / CLEANING PROCEDURE

It's a good idea to take a few hours to do a proper barrel break-in process with new rifles. The barrel will be much easier to clean and it may help to hold accuracy longer between cleanings. The idea is to burnish away tooling marks and NOT to impregnate the steel with carbon initially. This process is one we've tried and have had success with.

1: Shoot one shot using a jacketed lead-core bullet (The jacket material is harder than the solid copper X bullet and will do a better job of burnishing the barrel during the initial break in). Remove the bolt and clean barrel thoroughly as detailed below. (Note: When cleaning a rifle, it's best to have the muzzle angled downward and always use a bore guide. This ensures solvents, crud, and grime won't drip/run through the action: gumming up the trigger and ruining the bedding. Also, use a one piece coated cleaning rods for the cleaning and breaking in procedure.

Basic Cleaning Procedure, Steps a-g

(a) Use the proper jag and a tight fitting patch or nylon brush wrapped with a patch soaked with G96 Bore Solvent to remove the powder fouling. Use 2-4 patches and push each patch completely through the bore with one long stroke.

(b) Install the proper size bronze bristled cleaning brush. Soak the brush with G96 Bore Solvent before brushing. Brush should be stroked through the bore 10-12 times (Brush must be pushed completely through the bore prior to reversing direction). Add G96 Bore Solvent to brush while at muzzle end of the barrel half way through the process. Clean the bronze brush once process is complete with a blast of crudbuster or something similar.

(c) Use proper size jag or nylon brush and G96 Bore Solvent soaked patches until no discoloration is left on the patches. This step removes all copper fouling. The first two patches through the barrel after brushing should be pushed completely through the barrel in one long stroke. The remaining patches should be short stroked through the barrel a few inches at a time.

(d) Run one dry patch inside the chamber, remove and discard.

(e) Run two dry patches inside the bore, remove and discard.

(f) Examine muzzle and throat area for any signs of copper fouling. If copper is still visible, repeat steps "b" through "e".

(g) Wipe any excess solvent from the muzzle and action area.

2: Lube the bolt lugs with grease (White lithium based grease or an all weather high tech grease) and clean out the lug recesses. Also apply a small amount of grease to the bolt handle and cocking piece camming surfaces on the bolt.

Do this step after each cleaning.

3: Repeat the cleaning process (Step 1, "a"- "g") until 10 shots are fired cleaning after each shot.

4: Shoot five sets of two shot groups, cleaning after each pair of shot groups.

5: Shoot two five shot groups , cleaning after each five shot group.

6: Coat the bore with a light coat of oil (G96 Gun Treatment Oil) if the gun is to be stored for a length of time.

SUMMARY: The importance of having a clean bore cannot be over emphasized. We shoot a lot of different rifles at Kilwell Sports Ltd, and probably 4 out of every 5 guns brought into us with "just cleaned bores" have a significant amount of copper fouling still in them. It is this fouling which will most affect the accuracy of the bullet. Some guns will shoot 100 shots and seemingly not be affected, while others will not shoot well after 20 shots. The pure copper projectiles are a lot softer and are more sensitive to fouling.

