Instructions
For
Bore Lapping Kit

WARNING: Bore Lapping with the Wheeler Bore Lapping Kit, like any ammunition reloading operation, can be dangerous if done improperly. Read and follow exactly the instructions contained herein. Wheeler Engineering cannot and does not accept any liability, expressed or implied, for results of damage or injury arising from or alleged to have arisen from the use of the Wheeler Bore Lapping Kit.

Introduction

Thank you for purchasing the Wheeler Engineering Bore Lapping Kit. Bore lapping is not a new process, barrel makers have been lapping bores for years. However, the idea of lapping bores by firing bullets, impregnated with abrasive grits, is a relatively new concept.

Our favorite bores to lap are military bores that are a bit dark and rough, and handgun bores that tend to lead excessively. We have however bore lapped other types of guns and been quite satisfied with the results.

We believe that every gun will benefit from bore lapping. Cleaning will be easier, and in many cases accuracy will be improved. The bore lapping process removes a small amount of steel, but only a small amount, so don’t expect it to remove pits from badly neglected bores.

Please follow the instructions, and have a great time shooting and improving your favorite rifles or handguns.

Contents

Check to ensure that you have everything.

Cutting Grit -- 220 Grit Lapping Compound
Smoothing Grit -- 320 Grit Lapping Compound
Polishing Grit -- 600 Grit Lapping Compound
Two Application Plates

Instructions

1. Since every barrel is different there is no way to tell you how to achieve the optimum results for your barrel. We are providing the tools; the rest is pretty much up to you. The good news is that no one has reported ruining a barrel using a bore lapping...
process, although we presume that it is possible to do so. Please proceed in small steps rather than giant leaps.

2. The bore lapping process consists of shooting bullets, impregnated with progressively finer abrasive grits, through the bore of your rifle or handgun.

3. Clean the bore as thoroughly as you possibly can. You will get better results lapping a clean bore than lapping a bore that has a “build-up” of metal fouling.

4. You must also clean the bore thoroughly each time that you change grits of lapping compound, to remove all traces of the previous grit.

5. Study the condition of the bore as much as possible, based on your knowledge and the available equipment. This might be something as simple as carefully running a tight, dry patch through the bore to feel for tight spots and overall friction; or you might slug the barrel, then carefully inspect and measure the slug. Perhaps you are lucky enough to own or borrow a bore scope.

6. Smear a small amount of Cutting Grit (220 Grit) on one of the application plates. Lay a bullet in the middle of the Cutting Grit and using the other application plate, press down on the bullet firmly and roll it back and fourth in the Cutting Grit. This will cause the grit to imbed in either a lead or jacketed bullet. Wipe the excess Cutting Grit from the bullet and set it aside for reloading.

Step 1: Apply desired grit to plate and smear to give good bullet to grit contact.

Step 2: Roll the bullets through the lapping compound 5 or 6 times.
Step 3: The bullets just need a bit of the lapping compound imbeded in the sides of the bullet. Wipe off excess lapping compound. You don’t want clumps!

When impregnating .22 caliber rimfire cartridges, follow the above process, but press lightly, so as not to reduce the diameter of the bullet, and keep the lapping compound off the case as much as possible. Wipe off the excess.

Note: Apply compound to rimfires in a manner similar to centerfire bullets, except let the rim and case hang over the edge.

Wipe any excess compound off bullet and case, leaving only compound imbedded in bullet wall to do the lapping.

7. Light loads are thought to be better than heavy loads, but no data has been created to indicate that full loads should be avoided. Five shot strings (up to a maximum of twenty total shots) of each grit are recommended, again with a thorough cleaning between grits.

8. Load the impregnated bullets as any other bullet. Wipe off any excess grit from the cartridge and bullet.
9. Fire five rounds, clean and inspect the bore. Repeat as you feel necessary.

10. Repeat steps five through eight using the 320 grit lapping compound then the 600 grit lapping compound.