

937 BORE ARMOR

(may also be used as exterior and component surface treatment)

Normally Needed Supplies for cleaning a Used Barrel: WANT THE BORE AS CLEAN AS POSSIBLE

1. *Cleaning Solvent*
2. *Properly sized Cleaning Patches*
3. *Brass Bore Brush*
4. *JB Bore Cleaner or similar product*
5. *Chemical Copper Solvent*
6. *Denatured Alcohol, or Acetone*
7. *Cleaning Rod*
8. *Disposable, Absorbent Towels*
9. *Safety Glasses and Disposable Gloves recommended*
10. *Container of Bore Armor*
11. *Properly sized Bore Mop, (should fit snugly into bore)*
NOT TO BE UNDERSIZED OR LOOSE.

CLEANING A Used BARREL TO BARE STEEL:

The proper installation of the Bore Armor involves first cleaning the bore down to bare, dry metal. Otherwise, the coating will not be sticking to the base metal, but rather to the powder, lead, or copper fouling previously left in the bore.

Pre-fired barrels will require more cleaning than a new or an un-fired barrel.

- 1)** *Ensure that the firearm is unloaded and free of any ammunition.*
- 2)** *Clean out all loose powder fouling using a cleaning solvent on a clean patch. Soak patch with the solvent and push through the bore and pull back 6 to 8 times. Change the patch and repeat this procedure 6 to 8 times or until the patch comes out clean of any powder fouling.*
- 3)** *Using a clean or new (**this is critical**) correctly sized brass or stainless steel bore brush, wrap it with a clean, thick cotton patch and liberally soak it with JB Bore Cleaner or similar, that has a fine abrasive that will help remove metal fouling, but not adversely affect the base barrel metal.*
- 4)** *Run this brush/patch combination back and forth inside the barrel 30 times, reapplying fresh JB to the patch every 10 strokes. The brush/patch must fit the barrel tight and*

should take considerable force to move it and to ensure the cleaning compound is working properly. If it is at all loose, wrap another patch around the brush and reload it with fresh JB Bore Cleaner and continue.

- 5) Clean the bore again with a cleaning solvent and several patches to remove the abrasive bore cleaner.
- 6) Use a chemical copper solvent to remove any remaining trace amounts of copper fouling, following the manufacturer's instructions. Normally this requires 3 cycles to complete.
- 7) Degrease the bore with 3-6 patches wetted with denatured alcohol, or acetone.
- 8) The bore should now be completely clean to bare metal and ready for the application of Bore Shield.

BORE Shield APPLICATION INSTRUCTIONS: (for new or cleaned used bores)

Bore Armor is a very thin coat that soaks into the microscopic pores of the bore metal and should not be put on in excess. **LESS IS BETTER, NOT MORE!!!**

- 1) Work on a disposable or clean work surface. Bore Armor, though clear, might stain a working surface, so take care to protect any working surface during application, if it is of concern.
- 2) Ensure bore is clean and dry as outlined above.
- 3) Gently shake the Bore Armor container to mix.
- 4) First application should be done using a normal cleaning patch wetted with the Bore-Seal as it will tend to remove even more contaminants from the bore, and help to prevent contaminating the bore mop, in the next step.
- 5) Dip the bore mop into the Bore Armor and roll it against the edge lightly as you remove it from the bottle to remove any excess bore-coat.
Mop should be damp, not dripping.
- 6) Hold or clamp the firearm, muzzle down and carefully insert the bore mop into the chamber end of bore, (best when possible). Run the wetted bore mop down the bore working toward the muzzle with short 2–4-inch strokes. Pull back into the chamber in one stroke. This is counted as one stroke. Repeat 3 times. You should end up with a VERY THIN, LIGHT COAT and no pooled excess in the barrel. The objective is to simply wet and work the coating into the bore wall, not flood the barrel with material.
“MORE IS NOT BETTER”
- 7) Wipe excess from end of bore and around the chamber and stand the firearm upright, muzzle down, on an absorbent towel for 4 hours or more at room temperature to cure. Coating should be ready for step #8 after 4 the hour dry time. It is acceptable to allow

the bore to cure for as long as you like, until proceeding to step #8; but with a minimum of 4 hours.

- 8)** *Wipe off your cleaning rod while the coating is wet and dispose of any used patches.*
- 9)** *Shooting of 8-10 rounds will permanently cure the Bore Shield with the intense heat and pressure that is created at the same moment.*

Bore Armor may be reapplied once a year or as needed.

RE-APPLICATION:

Heavy shooters may reapply one coat to a clean bore once a year. Simply clean with a gun cleaning solvent, then follow up with denatured alcohol or acetone to remove any remaining oil or oil film. Then use a dry patch to remove any remaining residue. Apply as listed above, allowing the Bore Armor to cure at room temperature for at least 4 hours before shooting.

Shooting 8-10 rounds will again cure the Bore Armor. Light shooters will find that one application of Bore Armor will last for the life of the bore and may not have to be reapplied.

CARE AND CLEANING AFTER APPLICATION OF BORE SHIELD AND USE OF YOUR FIREARM:

After shooting your newly coated firearm, clean the bore with a solvent and patches only, (no wire brush). You will notice you will not have to clean as often. If you feel you must use a brush, we recommend a nylon brush. The first time you clean, you may see some minor copper fouling, but this will become less as you shoot and clean over time. The first bore cleaning should not take more than 10 patches. By the third or fourth cleaning, you will use between 4 and 6 patches. No additional lubrication is required inside the coated bore, but it will not harm the coating if a lubricant is used.

Using the Bore Armor as an exterior or component protective coating.

The curing of firearm exteriors & components, brass, etc.

These surfaces will take longer to reach a full cure (see product TDS) normally a 5-day ambient cure is required, though exposing the treated parts to a warmer airflow environment of 80 to 100°F will help the coating to reach a usable full cure faster.

Application:

Clean all intended surfaces* with denatured alcohol or acetone solvent to remove excess oils or other contamination from the surface to be coated.

Using a lint free, Bore-Shield dampened cloth, gently or lightly wipe a **thin film*** of the Bore Armor on all intended surfaces, such as firearm exteriors, components, ammunition. *thin film equals 3-5 microns – very thin.

Try not to allow the Bore Shield to pool or fill threaded holes, a light coating film is all that is needed to protect threaded parts, helping to reduce any potential corrosion and to also help prevent any potential thread galling).

Some blued finishes and some black oxide finishes will absorb the Bore Armor completely on a first coat, as it fills-in the surface porosity. If a second application is wanted, wait approx. 12 hours or more of room temperature or warm air exposure, before applying the second coat of the Bore Armor.

Clean brass, can be coated by dipping and placing neck down to allow for draining on a paper towel or similar –

Reason to coat brass for the serious reloader:

– As load pressures and heat increase, the coating will,

Reduce neck stretch, by keeping the brass significantly cooler during firing.

Brass will clean up without tumbling, just a simple medium pressure air purge

Primer pockets will stay in tolerance for many more rounds.

NOTES -- use of a Q-tip or similar, to absorb or remove any excess from the primer pocket or extraction lip.

The use of a semi-stiff wire, (or heavy paper clip through the primer hole), can help in the dipping process.

Loaded ammunition, the exterior, just apply a simple, thin wipe-on film.

This will provide for smoother ammunition operation and help to prevent corrosion, oxidation and also any grit from adhering to cartridge's exterior.

Coating of the bullet's exterior will help reduce corrosion, friction and aid in reducing barrel wear and metal fouling, as well as the aerodynamics should also be positively impacted.