WORK SMARTER, NOT HARDER

By Kenda Lenseigne

The invention of gunpowder is thought to be attributed to experimentation by Chinese alchemists in the pursuit of immortality. It is popularly listed as one of the "Four Great Inventions" of China and is now often referred to today as *black powder* to distinguish it as the propellant used in contemporary firearms.

We all like shooting our guns, but I don't think many will admit to a passion for cleaning them. It's a necessity that comes with shooting black powder, as the potential doom of jammed actions force us into the task; and while the discovery of the powdery charge dates back to the 9th Century, there's no need to use cleaning techniques that old.

It's worth first considering what happens when we drop the hammer on a black powder blank. The saltpeter, charcoal and sulfur react to produce heat, gas and a solid residue that comprises potassium salts about half of the original charge turns into the gasses and burning embers that you see at the muzzle which breaks the balloon. The rest turns into that grody gunk that can gum up the action, and we have to scrub off at the end of each shoot. Black power residue is not in itself corrosive, but when the salts produced by combustion mix with water in the atmosphere, bad things happen. The good news is that the very properties that make black powder residue corrosive (i.e. its solubility) also makes it fairly easy to remove so long as you have the right tools.

A few years ago, while sitting at my trailer after loaning out 8 guns for a new shooter's clinic, I stared at the mountain of cleaning products and work ahead of me and thought that there must be an easier way to get through the task. With that came some research and sure enough the answer was found. I've mostly retired all my original cleaning techniques in favor of throwing my guns in an ultrasonic cleaner. Originally developed

medical industrial purposes, you might have seen one buzzing away at your dentist's office. Using nothing more water than cleaning solution my emerge guns squeaky clean after a 10 minute blasted by a stream tiny bubbles created by ultrasonic sound waves.

Here are my personal picks and notes based on my experience with using each of these three machines:



2.5 Liter Ultrasonic Cleaner Made by Central Machinery Can hold up to two 3.5" BBL Guns, muzzle to grip Retails at Harbor Freight Tools for around \$79.99

Notes:

Pros: A very good deal for the price.

Cons: Does not hold up well if you want to travel with it as it is made with mostly plastic materials. I have gone through two of them due to wear and tear of trailer travel.



3 liter Commercial Grade Ultrasonic Cleaner Made by Kendal Can hold up to two 3.5" BBL Guns, muzzle to grip Retails for around \$159.99

Notes:

Pros:

- Heats cleaning solution quickly
- Commercial dials leave less to go wrong (vs. digital display).
- Travels well, stainless steel quality inside and out.
- Powerful motor makes for a superior clean

Cons: It's noisy!

9 Liter Ultrasonic Cleaner Made by Hornady Can hold 6+ guns (creatively) Retails for around \$300



Notes:

Pros:

Great for families or shooters who want to clean more than one set of guns at a time.

Digital display is easy to adjust temperature and timer.

Valve makes it easy to drain used solution without having to physically dump the machine out to empty.

Cons:

Because of the 9 liter tank, it takes a lot more solution to fill it, can be wasteful if only cleaning one set of guns. Larger capacity means more bulk if using it for travel.

Solution:

While there are many commercial products that come ready-made for ultrasonic cleaners, I have found that good ol' Simple Green beats them all hands down in regards to both functionality and price. Hornady's ONE SHOT is a close runner up, if you have the budget for it.

A note of caution when purchasing solution: Read the label carefully if you have blued guns, some solutions are not safe for all finishes and can strip the bluing.



Retails for \$17.99/Gallon at Midway USA



Retails for \$8.47/Gallon at Wal Mart

