

Dear Bruce,

Love your work. Here's hoping I can tap into your vast gun cleaning knowledge and experience to help cure my affliction. My problem is as follows: I love clean guns but I hate to clean them. I happen to have access to an industrial grade ultrasonic cleaning machine. Can I become lazy now? I have read your article regarding cleaning a gas valve and assembly for a 391 using an ultrasonic. If memory serves correctly you submerged the gas valve and suspended the assembly portion of the barrel into a magical solution that did all the work for you. The problem is I am not smart enough to remember what that solution was and/or any alternatives. Did you suspend the assembly simply because of space constraints? I have a 391 as well as other gas guns, pumps, and O/U's. The unit I can use is plenty big enough to allow me to submerge entire barrels and actions. Do you think if I had lots of magical solution (any suggestions welcome) on hand that I could use this machine to clean various barrels, chokes, actions, trigger groups etc... ? Any advice would be much appreciated. For your information, an ultrasonic works great on golf clubs. Hope the South is treating you well. Thanks in advance for your help.

P.S. Don't forget to add more lead to your targets during hurricane season.

Thanks again,

Chris O.

Dear Chris:

Bruce writes most of the stuff on Shotgun Report, but the series on Ultrasonic Cleaning was all my fault. Anyway, back to the question. The Beretta 390/391 series uses a gas piston to operate the gun. The important surface on the piston is the exterior, the part that interfaces with the gas cylinder. If this interface accumulates a build up of burnt powder, the gun stops working. Fortunately, the Beretta design of the piston/cylinder is a good one, and it is for practical purposes, self-cleaning. I know of a shooter who shoots a Beretta 390 about 200-300 rounds per month. I also know that he never cleans his gun. The gun is filthy. If shells stop ejecting, it rarely is the piston-cylinder. It usually is the burnt powder residue in the chamber area that causes the jam.

My point is, the important piston-cylinder surfaces are self-cleaning. Having said that, the interior of the piston gets really dirty. Ultrasonics works on the junk inside the piston, but it takes a long time. I never found any product that I could immerse the piston in that really speeded up the process to my satisfaction. It was the ultrasonic energy that did all the work. Because the piston is chrome plated, I never saw any problems with leaving the piston in the ultrasonic for hours.

My ultrasonic had one or two transducers and was made for small instruments. I'm aware that there are some industrial ultrasonics that have multiple transducers and really put a lot of energy in the tank.

If you have one of the multiple transducer, industrial strength ultrasonics, I'd use an all purpose cleaning solution you may have lying around and clean the piston in that. I'd do the same with the trigger group, but much less time as there may be soft metal or plastic in the trigger group and the ultrasonic may eat away at the soft materials.

Be aware that thorough cleaning with an ultrasonic will require that you relube the parts that need lube, because there will be no lube on anything after ultrasonic cleaning. Things that normally don't rust because they usually never get cleaned of grease or oil, will rust because the ultrasonic has stripped them clean of any oil or grease.

I suspended the cylinder because the ultrasonic tank was too small to take the whole barrel.

You could start a side business of cleaning guns.

Regards,

Roland Leong  
Shotgun Report's crazy guy.