

***Bang-Bang, Whiz-Whiz, O what a relief it is...
The 'O-Ring' & Sharps Solution***

By Bill Skillman

While rummaging around my gun and ammo safes trying to decide what to take to the range to shoot, I found a box of live Sharps cartridges I had bought from Cartridges Unlimited back in the 1990's. Since I was planning to host a 'Drill & Shoot In' for my Sons of Union Veterans Camp in two weeks I thought it might be a good idea to take my Shiloh out and see how well I could shoot with open sights after a 2 year hiatus.

After setting up the target, I opened the box of cartridges. Kudos to Cartridges Unlimited—the box was a unmodified jewelry box wrapped in thin, tan paper (looked like it had been treated with either wax or varnish), 'gift box' style and secured with a thin piece of twine. The cartridge tubes were flat base—the base paper looked to be sandwich paper. A pair of 'pillows' of folded tissue paper on the top and bottom of the box was to protect the cartridges from jostling. Unfortunately, after ten plus years, 3 of the cartridges had split at the base, and pooled powder covered some of the lower cartridges. Combined with humidity, this caused corrosion to form on the exposed portions of the conical balls. I took my plastic bristle brush and removed most of the crusty build up, then loaded my Sharps. When I shouldered the rifle and peered at a 3 inch orange target 100 yards away, I was in for a surprise. Both the front and rear sights melted into indistinct blobs—'old man eyes' had finally set in. The nice thing about Sharps, especially if you have seen one up close at places like the Horse Soldier, is the front sight is typically filed down almost to the base. So I readjusted the sight picture and squeezed the trigger. The Shiloh gave me a big, friendly, "*bet you missed me*" punch in the shoulder and sent the ball downrange.

I wish I could say that I put the first ball through the orange bull, but it hit at 3 o' clock and low (1 foot to the right, 3 inches low—a good 'line shot' but not sharpshooter quality). I shrugged and tugged on the loading lever—hmmm, it was stiff. Now this was new. I've fired hundreds of blank cartridges and dozens of live rounds in the past, and I had never experienced a stiff lever throw with the Shiloh. Even my old Ped didn't get 'sticky' live shooting until around shot 5-6. I figured the bullet lube had disappeared long ago, so excess pressure likely built up as the gas was pushing the ball up the barrel. After firing the third round, the loading lever refused to budge. I broke out a bottle of *Break Free CLP* and dribbled a fine bead in the gap separating the block from the breech and waited a minute. I was able to lower and remove the block for inspection. There was no 'crud' build up on any of the sliding surfaces (rails, gas check plate, etc). I deduced that the gas check was likely binding somewhere. I removed the plate and found a black splotch about .25 inches in diameter (at the 11 o'clock position) on the rear face. I gave it and the rear of the gas check a good scrubbing with a plastic brush and light coating of CLP. Took another shot only to have the block freeze again. I also noticed the percussion cap burned through—another sign of pressure build up.

After firing up the rest of the cartridges I was faced with the horrible thought that my beloved Shiloh had, like me, gotten older and maybe wasn't able to cheerfully shoot its way through whatever of round I thumbed into it. When I reached home I decided that I needed to try out the NSSA 'O'-ring solution for sticky Sharps breechblocks. Since I fired plenty of blank cartridges through the Shiloh last year with no problems, I figured the O-ring treatment would work for live firing. Based on my results, I could write up my experiences and post if for other Sharpshooters, who have struggled to keep their Garrett, Pederoli and Armi Sport Sharps firing, to use with their own weapon.

My first search was the North-South Skirmish Association website, where the O-ring information originated in the first place. Compared to us reenactors/living historians; the NSSA breechloader competitors probably fire more live rounds through their Sharps rifles and carbines in two seasons of practice and skirmishing than the original soldiers did in 3 years of service. But after 10 years I was surprised to find almost nothing on the NSSA Bulletin Board (Tips and Tricks section). One NSSA gunsmith, Charlie Hahn, is the recognized Sharps 'guru', who advertises O ring-Sharps conversions for \$20. But who wants to send their Sharps away if they can do it themselves?

Not finding anything current, I returned to my 2002 article "***Everything you wanted to know about the Reproduction Sharps (but were afraid to ask)***". I had first learned about the O-ring/Sharps connection from

Badger Sharpshooter and friend, Jim Bouillon—who was then a member of the Co. G 1st USSS-NSSA skirmishers. This is what I re-discovered:

Last January Jim Bouillon of the Wisconsin Co. clued me in on how to improve the performance on all Pederosoli Sharps—without mucking about with the gas sleeve. He got his advice by an NSSA gunsmith by the name of Sam Dobbin. Sam told Jim to remove the gas check, flip it faceplate down and grind down the circular/washer face of the check (the part that mates into the recess and surrounds the protruding block cone). Take very small swipes of metal off until you remove between 1/32-1/16th of an inch. Dobbin then inserts a rubber or neoprene 3/4 x 1/16 "O" ring into the space, covers it with grease, and then pushes the gas check down over it. The ring acts like a floating spring, it maintains enough pressure on the gas check that when fired the check will move forward and seal the breech. Also, the O-ring provides enough 'play' that it doesn't interfere with the blocks up and down action. According to Jim his new rebuilt Garret block action stays operational and smooth even after 50 or 60 rounds (both live and blank) have been fired through it.

Dave Goodwin, another NSSA shooter sang the praises of Mr. Dobbin's solution: *"Proof: Brand new out of the box my Pedersoli Sharps was good for about 10 or 12 rounds before the action started to seize up due to carbon buildup in the cavity jamming a tight face plate a few microns forward. Carbine was not even functional for competition before the modification. Every 20th or 30th round pull the block, take the plate off with my fingers, apply a little grease to keep the "O" ring from burning out. O rings cheap and plentiful, keep a bag on hand."*

That sounded easy enough. So with camera in hand, I proceeded to do my own 'step by step' O-ring conversion for my trusty Shiloh and new Garrett. Even though I hadn't fired my Garrett yet, my comrade, Dan Wambaugh, who also owns a Garrett, gave up trying to shoot his after it froze up after only 5 shots. While Dan is familiar with the O-ring conversion, he never thought to try doing it with his own rifle.

On July 18th, I took the Garrett and Shiloh (with O-rings) to let my Sons of Union Veterans Camp to try their hand at *'making the string'*. I am pictured with the Garrett—still going strong after 10 shots and the loading lever still slides easily. The O-ring solution really, really works!



Photo by Skip Bryant



Chain O' Lakes Sportsman Club. Mancelona, Michigan

How to install the Sharps-'O' ring (in pictures)



Garrett & Shiloh blocks, gas check plates (removed) and O-rings (Ace Hardware stock # 3744B 7/8 x 3/4 x 1/16)



Step 1: Remove O ring from packet



Step 2: Press O-ring into breechblock recess



Side view of O-ring in block recess



Lithium grease (used to protect O-ring)



Cover O-ring with Lithium grease



Return gas check into breechblock



Opposite page: Assembled breechblock-front & side views-note slight gap between gas check and block face—it is 'springy' to touch or might spring loose from the block during installation.

I found that it took a little work to slide the O-ring prepped Garrett block back into the breech. The slight 'forward' pressure provided by the O-ring required me to push down on the gas check with my thumb while sliding the block into the breech. I suspect, if you own a Pederosoli or Armi-Sport, you might find your gas check giving you a similar amount of resistance. It takes a little finger pressure and dexterity to slide the block into place; but you will immediately notice the difference when you draw the lever up and down. I used the excess grease on my finger to lubricate the slides on the outside of the block. When I removed the block at the COLSC range after shooting, they were still clean (I used flat base cartridges to minimize fouling).

Combined with the 'flat tail' cartridges, I believe the O-ring system will work very well in all models of Sharps reproductions. I find it to be a perfect solution for live firing my Sharps rifles; and there is 10 years of favorable comments by NSSA breechloader competitors who support this. If every Sharpshooter learned how easy the 'O-ring solution' is everybody would be using it. Well, I have provided 'step by step' photos on how to install the O-ring/Sharps solution. So, it's time to get started converting your Sharps from a 'pop-gun' to a real rifle, as the original veterans said: "Worthy of a Sharpshooter".

Good Shooting!

~ I welcome your thoughts and comments ~

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