

Customizing My Stoeger Coach Gun For Cowboy Action Competition



By Thundervoice

Last summer, I got involved in cowboy action shooting and started out using my grandfather's [Winchester Model 1897](#) as one of my competition guns. I soon realized my heirloom shotgun wasn't competition-friendly for several reasons, including shell ejection issues and a barrel that was too long. So I decided to get a new shotgun to replace what needed to be a safe queen.

There are three primary shotguns used in cowboy action shooting: the Model 1897 with a 20-inch barrel, the Model 1887 lever action shotgun, or a side-by-side coach gun. The 1897 and 1887 guns are both John Browning designs. The 1897 and coach guns are the most common used by cowboy shooters so that's where I started with my research.

Knowing that many of the faster shooters were using the 1897, I decided that was my first choice. Then I started looking at free advice from the internet (worth every penny!) and was consistently seeing that if you want to shoot an 1897, you need to get a gunsmith to slick it up. And you need a backup.

There are over 100 parts in an 1897 and something is always breaking. While there are still companies that manufactured 1897 clones, I read conflicting information about the quality of the clones and I didn't want to buy one for competition that would be older than I am.

So I started looking at whether a coach gun would be a better option. The term “coach gun” is a generic description for a side-by-side shotgun with an 18-20 inch barrel. It is called a coach gun because it was widely used by stage coach guards in the Wild West days.

Coach guns are used by a lot of beginning cowboy action shooters and some of the better shooters use them at my local competitions. They are a good choice for beginners because they have few moving parts, are relatively inexpensive, and easy to find.

There are several manufactures of coach guns, but I decided to go with the 20-inch barrel [Stoeger Coach Gun](#) because that was the brand used by most of those I was seeing at competitions. But even after picking the Supreme model, I still had to make a few more decisions. I had to choose the gauge (I went with 12 gauge as that is what most use at matches), finish (blued, stainless, or nickel – I picked blued), single or double trigger (I chose double based on advice from others), and standard or Supreme model (I went with the Supreme because it has screw-in choke tubes and a thicker recoil pad).

The ability to change the chokes was the main reason I went with the Supreme model. The gun I chose lists for \$549. I found one online for \$100 less (plus shipping and FFL fee) and it arrived just in time to use in the next cowboy match.



I shot that match using the shotgun pretty much straight out of the box, which turned out to be a mistake. It was just another day of education in my journey to improve my cowboy shooting skills as I had to overcome several challenges associated with shooting a new gun.

For those who want to criticize my use of a new gun in a competition, at that point in time, I was measuring my shooting times with a calendar instead of a stopwatch. I was focusing on safety and technique, not speed, so I was comfortable with the few rounds of practice I got with the gun the day before the match.

The struggles with the gun were many. The biggest was its stiffness when trying to break it open. It took a lot of effort to open after firing both barrels, but at least I wasn't breaking it open over my knee like one of the other shooters who also had a new Stoeger.

The next challenge was the safety. The factory Stoeger resets the safety every time the gun breaks open. So I had to remember to flip the safety off before pulling the trigger. Pretty much every shooter at the match that day pulled me aside and privately told me that I needed to “fix that factory safety.”

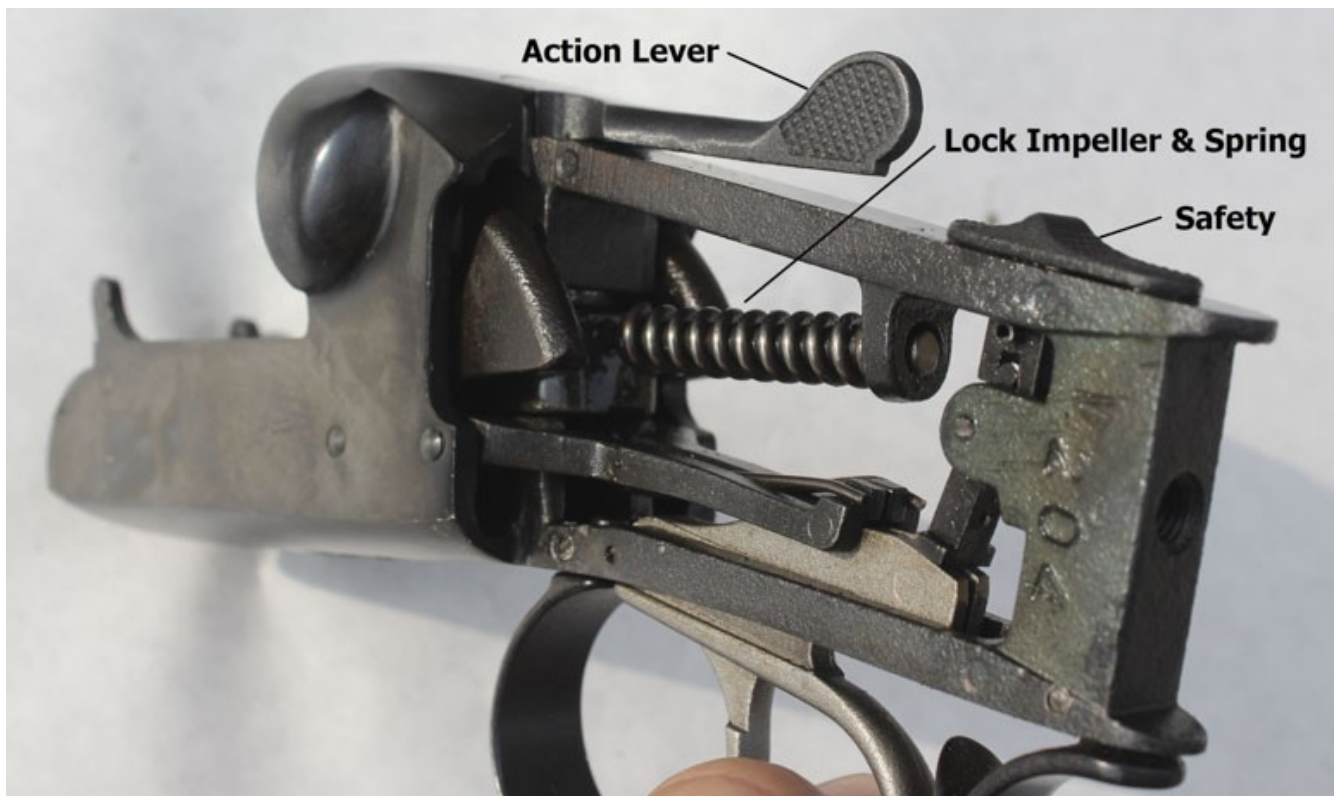
Finally, the chambers were tight enough that the shells didn't fall out after firing like they were with the other cowboys' guns. I may not be the brightest bulb in the pack, but I knew pretty quick that my new shotgun was going to need some work.

After the match, I picked the brains of a few cowboys and got a lot of good advice. That next week, I watched several YouTube video on how to slick up a coach gun. With that knowledge and three engineering degrees, I decided that I could slick up the shotgun myself and bypass the gunsmith's services.

The essential tools for slicking up a coach gun are a grinder, sandpaper, and polishing compound plus a screwdriver and socket for removing the buttstock. The steps I took included:

1. **Shortening the lock impeller** The lock impeller is the rod between the lever cam and the safety. When you press the lever to open the action, the cam rotates and pushes the rod back. This engages the safety. Everyone told me that the first thing I needed to do to the gun was shorten the impeller so that it would not engage the safety when I broke it open.

I removed the stock to access the action, removed the spring and rod, and then took the rod to my grinder. A grinder made all the difference in the world in doing this. I ground off a little at a time and reinstalling it to see if I needed to grind off more. Eventually, I got it to where the safety would not reset on opening. The photo below shows the lock impellor after I finished my grinding chores.



2. **Shortening the lock impeller spring** The spring around the lock impeller is stiff and requires a lot of pressure on the lever to break it open. Removing some of the spring makes it easier (and faster, the real reason) to open the shotgun. At the same time I was shortening the rod, I was also

cutting small amounts off of the spring. I was not able to actually cut the spring with any of my tools, so I had to grind off segments of the coil.

Most of the online advice recommended using a Dremel tool for cutting the spring, but I couldn't find mine due to a recent move (it's since been located). Each time I took off a little bit from the spring and the lock impeller, I would reinstall both to check safety function and lever pressure. I ended up adjusting the spring and impeller at the same time because the impeller is hard to remove and reinstall with the full-length spring. As the spring is shortened, the impeller and spring become a lot easier to take out and put back in.

3. Polishing mating surfaces Everyone had told me that the shotgun would loosen up over time with use and become easier to break open. But they also told me that I could speed up that process by polishing the surfaces that slid against each other when opening. I started by polishing with fine grit wet/dry sandpaper to get the finish off of the parts. After using sandpaper, I put toothpaste on the surfaces, reassembled the shotgun, and opened and closed it several dozen times.

Like the spring, a Dremel tool is recommended for this process. I proved that sandpaper, toothpaste, and elbow grease can achieve the same effect. Eventually, it got to where it would just fall open when I pressed the lever, which is what I was looking for. You can see in the photo below that the surfaces are still not smooth, but they are smooth enough to meet my needs. The image on the left is the receiver and the one on the right is the forestock.



4. Enlarging the chambers Once I finished the action, I moved to the barrel, making the chambers a little larger so that shells would slide in easier and fall out with a short jerk. I took wet/dry sandpaper and worked it into the chambers until a shotshell would fall out without resistance. You can also use a honing stone to do this, but I couldn't find mine due to the move (unlike the Dremel, the honing stones are still hiding in a box somewhere the garage). If I ever find them, I'll use them lightly to make sure the chambers are smooth and even.

5. Funneling chamber mouths The final step was to make take a spherical grinding stone to the chamber mouth. This creates a funnel effect that makes it easier to insert the shotshells. I originally took off just enough material to remove the sharp edges of the chamber, which were catching the plastic of the shotshells as I tried to insert them. This is the one bit of gun tinkering where I stopped too soon.

The photo on the left is my chamber mouth as it currently exists and the photo on the right is the chamber mouth of a champion shooter's coach gun. I was surprised to see how much material he

actually removed when I got a chance to handle it earlier this month. I'll be pressing the grinding stone back on my chamber mouths some more in the near future until a part of the lip is gone on each chamber.



With these improvements, my shotgun technique at the next match was much smoother than it had been at the previous match. With a few more matches, the gun loosened up even more, just as others had promised it would.

While I still need to do a little more grinding on the chamber mouths and polishing of the mating surfaces, I'm happy with my efforts to stick my toe into the gunsmithing realm, although that term is probably too generous for my fine tuning. Gun tinkering is probably a more adept description for my activities.

There are a couple of additional items worth noting. If you are going to buy new guns to get into cowboy shooting, you can forget about gun warranties. As soon as I ground the first atom of material off of one of the parts, my Stoeger was out of warranty. That's life.

The gun is simple enough that I think I can fix about any problem that might happen if I can get the parts. And if I can't figure it out, one of the other cowboy shooters will be able to tell me what to do. So I wasn't too concerned about voiding the warranty.

The other thing worth noting is that I'm shooting cowboy loads in this shotgun. I started out shooting Winchester AA Low Recoil/Low Noise Target Loads, which use 26 grams (~0.9 oz) of #8 shot with an advertised velocity of 980 fps. They are not cheap locally, so I bought a shotshell reloader and started loading my own light loads. I haven't shot hunting load shells in this gun, but may do so in the future, although with 20-inch barrels, the recoil from a heavy load may be more than I want to deal with.

This piece isn't intended to be a gun review in the classic sense of a review, especially since there is already [a Stoeger Coach Gun review on TTAG](#). But I will offer a few review-type comments about this shotgun.

It is a simple gun. Broken down, it will fit in a backpack. The 20 inch barrels are the longest component when broken down. Overall, it is 36.5 inches long.

Fit and finish are nice and consistent with, or a little better than, what I expected for the price point. It's easy to load and shoot and would be a good first shotgun for someone who doesn't know much about loading and operating a pump or semi-auto.

It is easy to work on, as I have described above. I've heard that repair parts can be hard to come by, but I haven't had to deal with that aspect of it yet. I've been told that competition guns will all break at some point, usually in the middle of a match, so I'm sure I'll be looking for parts eventually. Or I will have to buy a new one and start the slicking up process all over.

This is a great shotgun for getting started in cowboy action shooting. I have no buyer regrets and will likely get another at some point in the future as a backup. I also hope to try it out at a local skeet range sometime before dove season starts this fall so that I can decide whether it is as good a hunting gun as it is a cowboy gun. But, when I do, I'll be sure to have a range of shotshells handy and a backup gun just in case.