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The history of the Cylinder & Slide Ultimate 1911 Extractor.

About 6 years ago I began to notice that the extractors that are being used in all of the name brand 1911 pistols and the extractors that we were using would begin to lose their tension at around 1000 rounds and that by 3000 to 4000 rounds many of them had lost enough tension that they would begin to cause failures to extract or failures to eject because they were losing their grip on the case before it could be fully ejected.

Being a dinosaur in the 1911 business I knew that the Colt 45 ACP extractors were good for around 20,000 rounds before they would show wear on the extractor hook but they would still have their tension on the case.

I decided that I wanted to find out why the newer extractors were losing their tension. First I noticed that the nose profile of many of the extractors was incorrect. This was causing undue stress on the extractor if the extractor had to jump the rim of the case on slide close. Now most people think that during the feeding cycle the slide comes forward, pushes the cartridge out of the magazine, up the frame feed ramp, up the barrel feed throat into the chamber as the rim of the cartridge slides up the breech face until the slide closes on the fresh cartridge. Not so extractor breath!!

I have had the fortune to observe the feeding cycle of several 1911 pistols taken with high speed digital movie cameras. The rounds that actually feed out of the magazine don't feed smoothly up the frame feed ramp and barrel throat. The bullet nose actually hits the feed ramp of the frame, bounces up and strikes the barrel feed throat and then bounces up against the top of the chamber, and then the cartridge chambers as the slide finishes closing. Now there are the rounds that are thrown out of the magazine by the inertia caused by the slide impacting the frame when it stops against the frame. The round is so heavy that the pistol actually moves to the rear so fast that the round stays where it is. This causes the round to be thrown out of the magazine, up the feed surfaces and into the chamber before the slide ever touches it. Now that the round is already chambered the extractor is forced to jump the rim of the case as the slide closes on the round. The extractors that have an incorrect nose shape are slammed back and to the right with extremely violent force. Ok remember this as we go on.

Now let's have a look at how the extractor is fitted in relationship to how it actually grips the cartridge. I have noted that most extractor hooks are too long. This causes the extractor hook face to contact the case in the relief angle above the rim of the case. This causes the cartridge to tip to the left with the cartridge base not being in full contact with

the breech face. When the slide chambers the cartridge the cartridge is slammed straight with the chamber and the base of the cartridge is now fully contacting the breech face. All of this causes the extractor to be slammed to the right and back with great force. The face of the extractor hook gouges a notch in the case relief which also puts a great strain on the hook itself. All of this force put on the extractor can only be resisted by the tension in the extractor. The extractor must have enough tension to return its grip on the case rim as the slide opens under recoil to extract the empty case.

Now I asked myself why, doesn't the extractor retain its tension. Remember the 1911 extractor provides its own spring force to return it to the proper place. That is when I began to suspect that the steel being used was not the correct spring steel. I purchased every extractor that I could find from known sources. I then sent them out to a metal analysis laboratory to have the type of steel used identified. Guess what, every extractor that I had tested was made from the same steel. And that steel is not the spring steel that is called out by the military prints.

Ok, I thought that it would be worth having extractors made from the spring steel called out on the military print. That is when I got my next lesson. The proper spring steel is not available in the diameter needed. The only diameters that are available would mean that more chips of steel would be on the floor than in the extractor and what's more this steel is really expensive in comparison to the steel that is currently being used in 1911 extractors.

Let's just say that I am probably crazy but I had to buy 8000lb. of the correct steel alloy to get it in the diameter that I needed. I just wanted to make an extractor that is correct. I have not only made my extractor from the correct steel, I have made it to the proper hook length, with the proper contours, with the correct radiuses. We are tensioning them to the military print specification. However, due to the different tolerances that slides from the various manufacturers are made to, my extractors may have to be properly tensioned to your slide.

Now let's talk about heat treatment. I not only have my extractors heat treated to the correct hardness, they are also austempered. This is a special process that makes the steel much tougher so it will wear much longer. This process adds to the cost of the extractor. Every extractor is quality checked. We test the hardness on every extractor. You will see a tiny dimple on one of the flats on the shank of the extractor. That dimple is made by the diamond tip on our Rockwell Hardness tester. Each extractor will come with a certification slip showing the hardness of the extractor along with the initial of the technician who checked it. What the heck, I figured if I was going to do it I might as well do it right.

So there you have it. I feel that I have made the best extractor on the market bar none.

Bill Laughridge
President, Cylinder & Slide Inc.