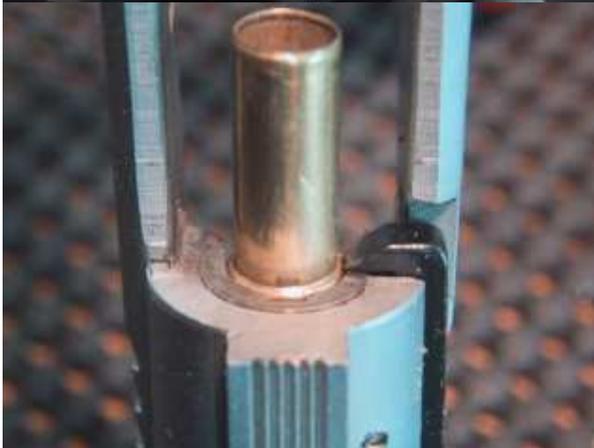


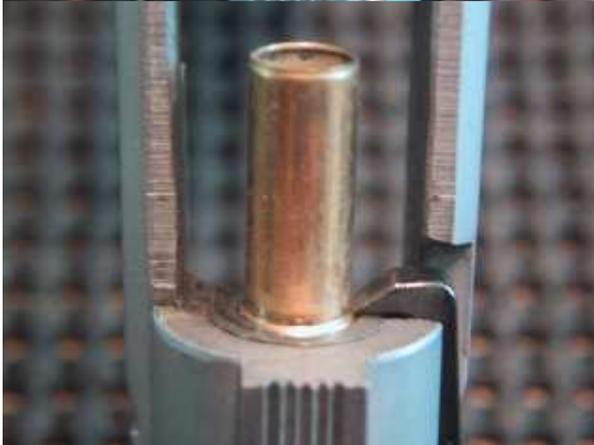


Phoenix Arms HP22

How to Repair the Extractor



So why not just buy a new extractor? The stock extractor on mine came with a very sharp, thin point with a curve to it. I expect these may be ground and they may differ somewhat. This may be one of the reasons some people have great success with these guns and some have failures from the beginning. I knew before I even fired the gun the extractor was going to fail. The very tip was just too thin. So, when you re-shape it yourself you can get a bit of a radius on the end to provide a thicker contact area. I'll probably order some new extractors and re-shape / fit them to the guns just to have for spares.



See how much more grip it gets on the rim here. Plus, the contact area is now thicker but not too thick so it's stronger.



Pull your slide and set on a couple of risers.



Insert a spent casing with strike mark up in normal fired position.



Close slide.



Open slide.

If it does this, your extractor sucks.



This is what it should do. It should grab the case and hold it somewhat firm until extracted.

When you close the slide you should feel and hear a nice grab of the rim.

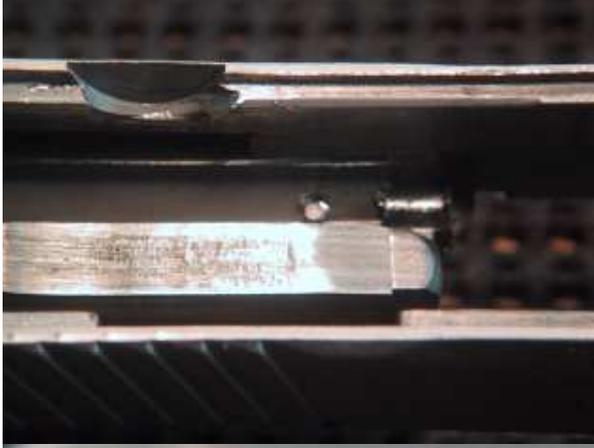


Try the spent casing with the strike mark in different positions. When the round is fired the area by the feed ramp will expand a little more so when you rotate it you can sometimes get a tighter fit for testing



Remove the extractor by driving the pin out from the top.

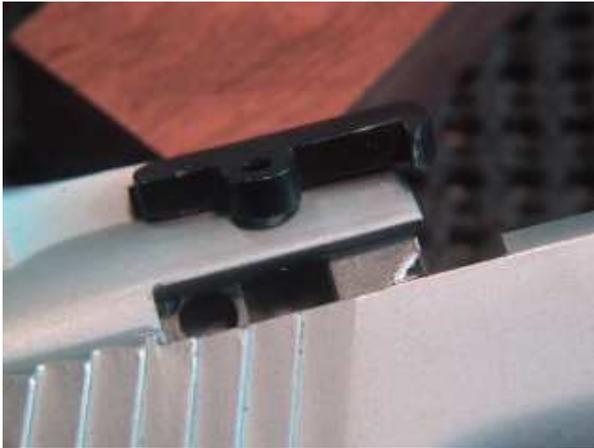
I didn't have a small enough punch so I just broke the twist off a tiny drill bit and used that. Mine came out easy. If yours is giving you a problem I suggest letting a penetrating oil soak on it for a while.



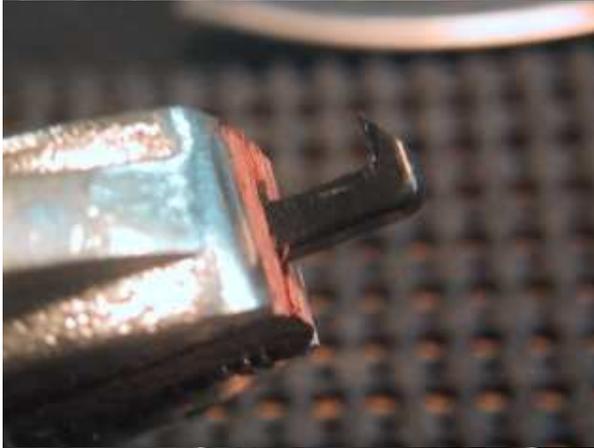
Pin comes out the bottom.



You may be able to see in this image how some of the tip actually broke off. I'm not slamming Phoenix Arms at all. This isn't a \$400.00 gun. My next purchase I'll just take the time to fit and file the extractor as soon as I get it.



You can see here where the extractor hits up against the slide frame. Need to remove a little material from the extractor so it seats further into the rim of the case.

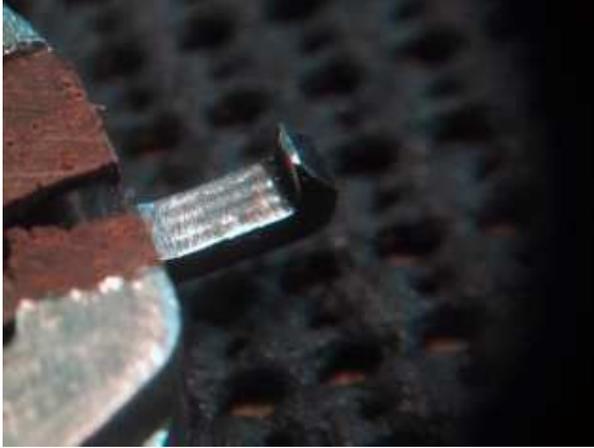


You need to scribe a reference point on the extractor so you know when to stop. Mine was easy out and easy in so I planned on taking a couple of stabs at it to get it right. Got lucky I guess because it worked on first try. Ended up taking about .02" off.



Use a triangle file to remove material. This will keep you from removing any on the face that grabs the rim. It's also better for getting in the corner. Do not remove material from the face. You need a Jewelers Loupe to do this right.

You can get a set of these files and the Jewelers Loupes at harborfreight.com/ for very little \$.



Cleaning up the tip – This is the most critical part. A few thousandths of an inch can make a difference here. All you want to do is take enough off to give it a small radius instead of a point. It has to get behind the case rim.

Cleaning up the tip is going to leave a little burr on the inside face. When I first saw that through the loupe I thought that might be a good thing. Nope. It held the case to tight. So, remove the burr if it gets one.

You really need a Jewelers Loupe for this step.



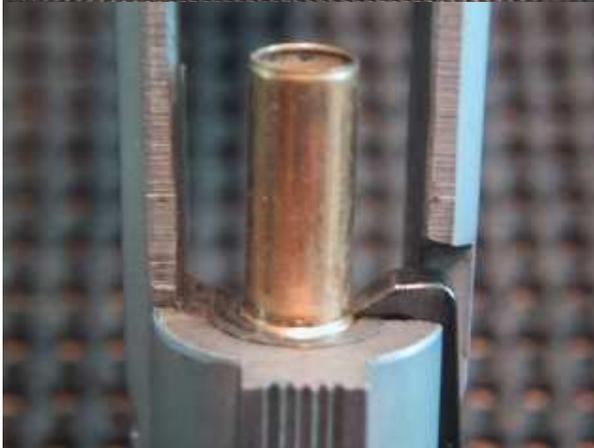
Now a little polishing. Using 1200 grit or finer sandpaper polish the front edge a little.



Finish up with a little metal polish. Flitz works good.

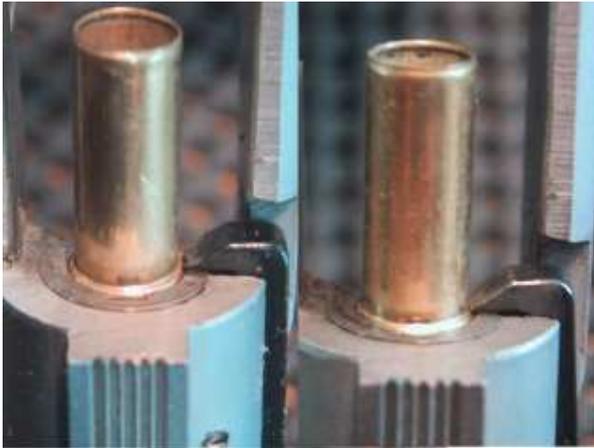


Done. Rapid fired more than 200 rounds with no problems. This whole process can probably be done in ten minutes.



That's Sweet. Look at the firm grip the extractor has on the rim now.

I've never had a failure to fire or feed with this gun using Remington Bulk, Federal Bulk and CCI Mini Mags. The only problem I've had has been the extractor issue, which is now history.



Left – Before

Right – After

Notice on the right the angle of the extractor to the slide frame.



Snug but not too tight.