The disassembled razor is soaked in unsweetened Lemon-Lime Kool Aid. (yes you read that right-for the citric acid). Mix it according to the package without sugar and soak all parts in it. This will really clean the nickle plating. After soaking for a couple of hours, all parts were scrubbed with an soap/steel wool pad. Keep the pad charged with soap to avoid scratches. After this, the parts will shine. If you want to go the extra mile and polish, I used a red rouge with a small felt wheel on a Dremel tool.





First Repair: the crimp joint between the knob and barrel was loose enough to not hold the two parts together. We shall attempt to tighten that crimp.



A piece of steel wire is formed to loop around the crimp in the barrel. Soft wire (balin' wire) was used to easily install and remove around the barrel without scratching it. The wire must be thick enough to fill the crimp and sit in the bottom and stand proud of the outer surface of the barrel The barrel/wire assy is placed in a 3-jaw machine chuck and lightly crimped using the chuck. A large drill chuck may be used as long as the tool crimps it on 3 sides





Crimp once and then turn the barrel 180° and crimp again. This will crimp the barrel in 6 places. Take care that the barrel does not deform too much and lose the circular shape when crimping. You're just trying to massage it back to a tighter fit.



Check the fit of the knob in the barrel and it should have a good interference. If not, re-crimp the barrel until it does have an interference fit. Once the parts have a good interference, snap the knob and barrel together using a vise. A vise gives better control than a hammer. Just sayin'. The knob should turn in the barrel but stay snapped together.



Tweaking the door legs to make sure they are straight and no sloppy fit

On to reassembly. Install the silo doors on the mounts and check the fit of the doors. Ensure they line up with each other and fit together properly. Ensure the side to side movement of the doors in the mounts is minimal. Check the door legs and ensure they are straight. Any adjustments were done with a pair of miniature smooth jaw needle nose pliers.



Hold onto the frame and operate the doors with the stem to ensure they will work ok without help







Install the collet onto the post and check the fit. It needs to be snug but not tight as you will be manipulating it to adjust the razor gap. If it is too tight, lightly pry the collet open with a small screwdriver. It just needs to be snug so that it will hold onto the post but can be rotated on the post.

Also notice that the post will seat onto a shoulder inside of the collet. During adjustment, you must keep the frame post seated against this shoulder.





Fully install the adjustment collar onto the collet. Ensure it is fully threaded on.





Reassemble the razor head and ensure all parts operate freely. If they don't, find the parts that are binding and fix. If they bind, they are either bent or there is a burr on the sliding member. Look for it.



On to adjustment! Looking on the B&B wiki (Equipment-Razors-Safety Razors-See Also Double-Edged Safety Razors Ranked by Blade Gap), we find that a Gillette Adjustable at a 5 has a 0.81mm or 0.032in gap. A 5 is chosen as it is in the middle of the setting range.



Load a used blade as the gaps are measured with a blade installed.



Visegrip used as a 3rd hand to hold feeler gage.



Ciseg

Gap to close

Hold steady, keep the collet seated against the post

While holding the collet/adjusting collar and maintaining the gap with the feeler gage, turn the adjusting collar until it closes the gap between the blade support and the adjusting collar. Do this carefully so you don't force the two apart as it will affect the setting adjustment.

Turn adjusting collar only, do not turn the collet

Still holding steady

Gap closed



The head gap is adjusted, but the numbers don't line up. Next we will fix that.



Hold the head of the razor and turn the collet/adjusting collar as a unit until the number 5 is lined up with the spring pocket. Make sure the collet and adjusting collar do not move independantly.





After resetting the collar position, push the collet shoulder against the post just as before and check gap with feeler gage to ensure that gap is still set correctly.

Now to reinstall the spring for the adjustment collar. For the next steps, do not rotate the collet/adjusting collar.



Pull the collet/adjusting collar straight down the shaft and remember to not rotate it. If you do, you will lose the gap setting.



Install the spring into the slot pocket



Reinstall the collet/adjusting collar onto the post without rotating it. Ensure the post is fully inserted into the collet against the internal shoulder

Install the barrel/knob while making sure the collet/adjusting knob does not move.

Press it on by hand only until tight. This should lock the collet onto the post and lock the gap setting.



Check the gap again and note that I still haven't removed the spring clamps that arch the blade. You still need the clamps as the spring and nut haven't been installed yet Fully press the head/collet assembly into the barrel/ knob with a vise. Note that I removed the silo doors and mount and pressed against the blade support.







Reassemble the spring and nut using the handy paper clip tool.







Perform a final check of the #5 gap at 0.032in. Now go check #1 gap at 0.022in and #9 gap at 0.045in. They should all be set correctly.

