

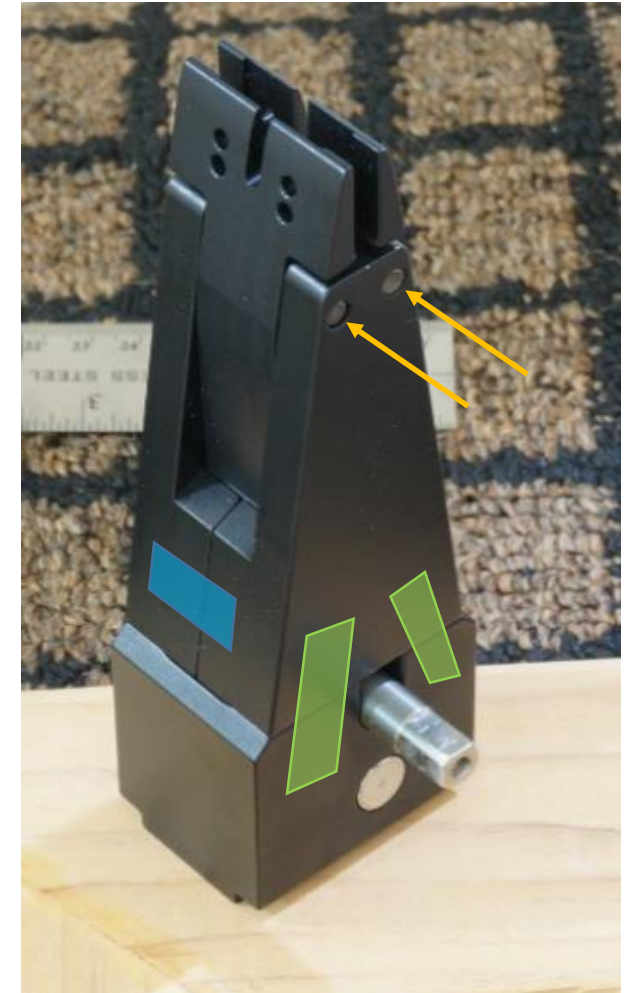
Wicked Edge Gen-3 2017 clamp disassembly/cleaning

You'll be removing the 4 allen-head bolts in the underside of the tensioning assembly. The bolts are long enough that they also extend up into the 2 sides of the clamp body. But first...



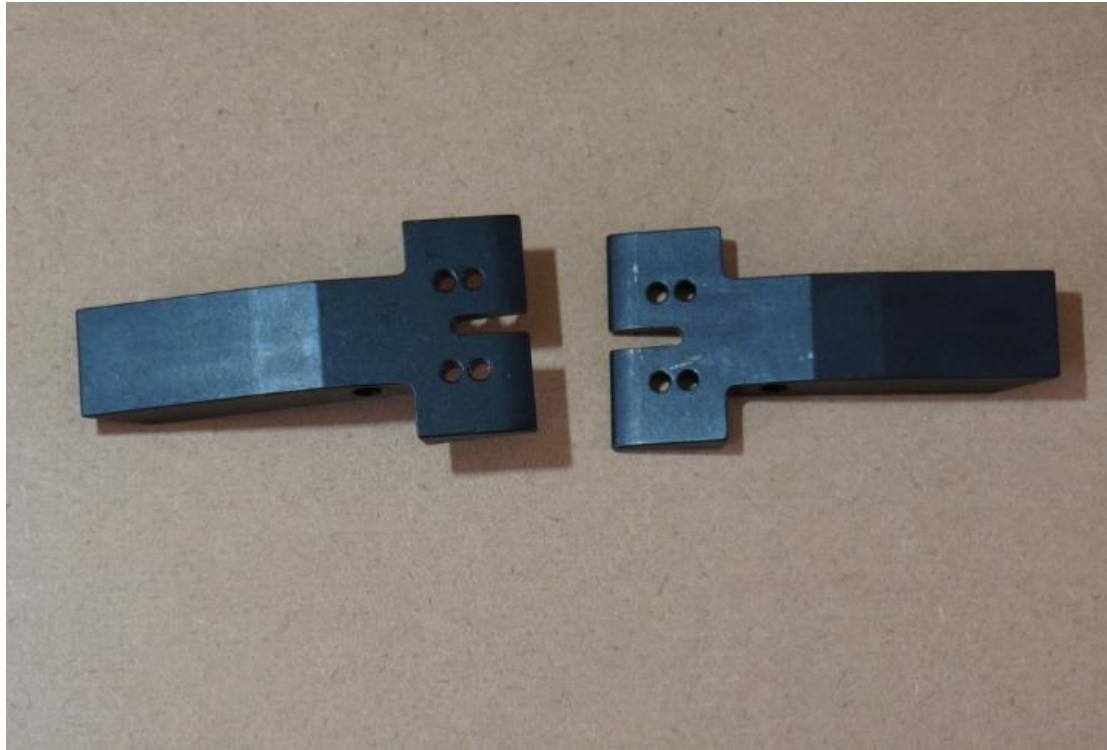
...remove the 2 clamp jaw pins (orange arrows) so that you can remove the clamp jaws (use the depth key prong to push the pins out). Also put a piece of masking tape across the clamp body split (the blue rectangle) on both sides of the clamp so that it stays together once you remove the 4 bolts.

Also tape (green) the tensioning assembly to the clamp body on both sides, to help hold it together when you take the bolts out. But don't remove the bolts quite yet...

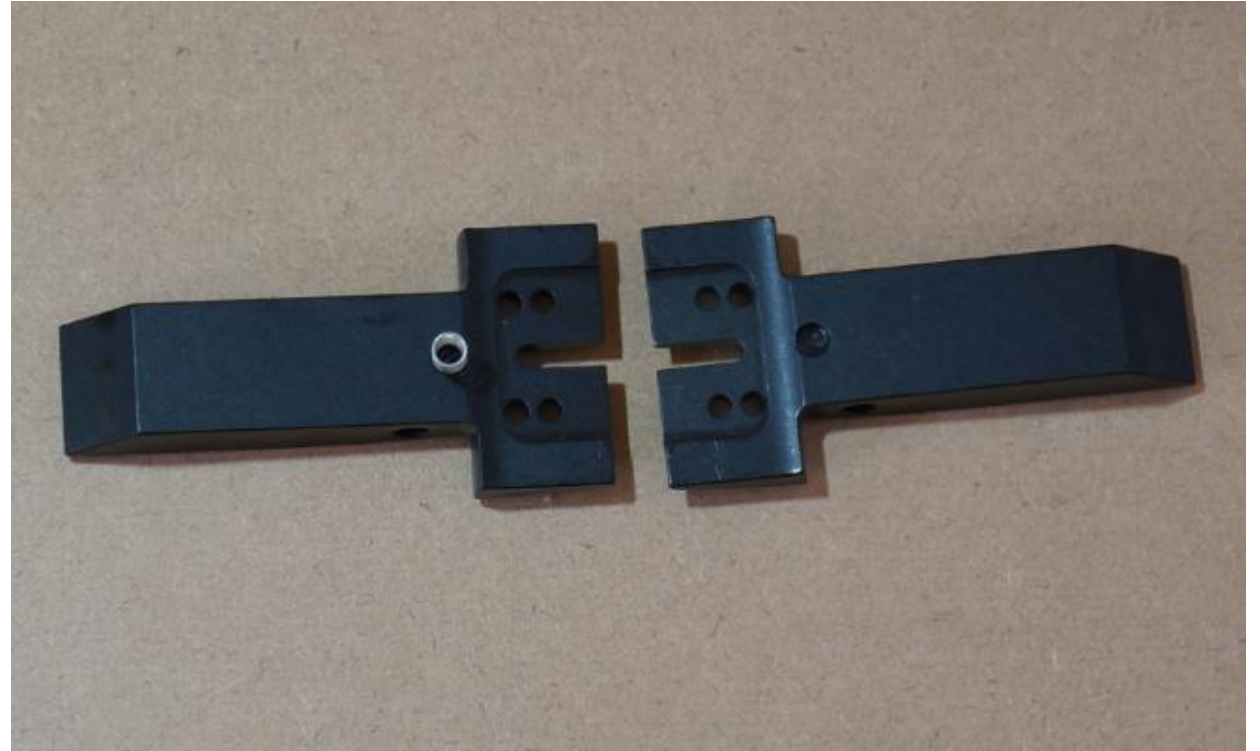


Here's what the clamp jaw pieces look like, once they are removed and separated:

Outside faces



Inside faces

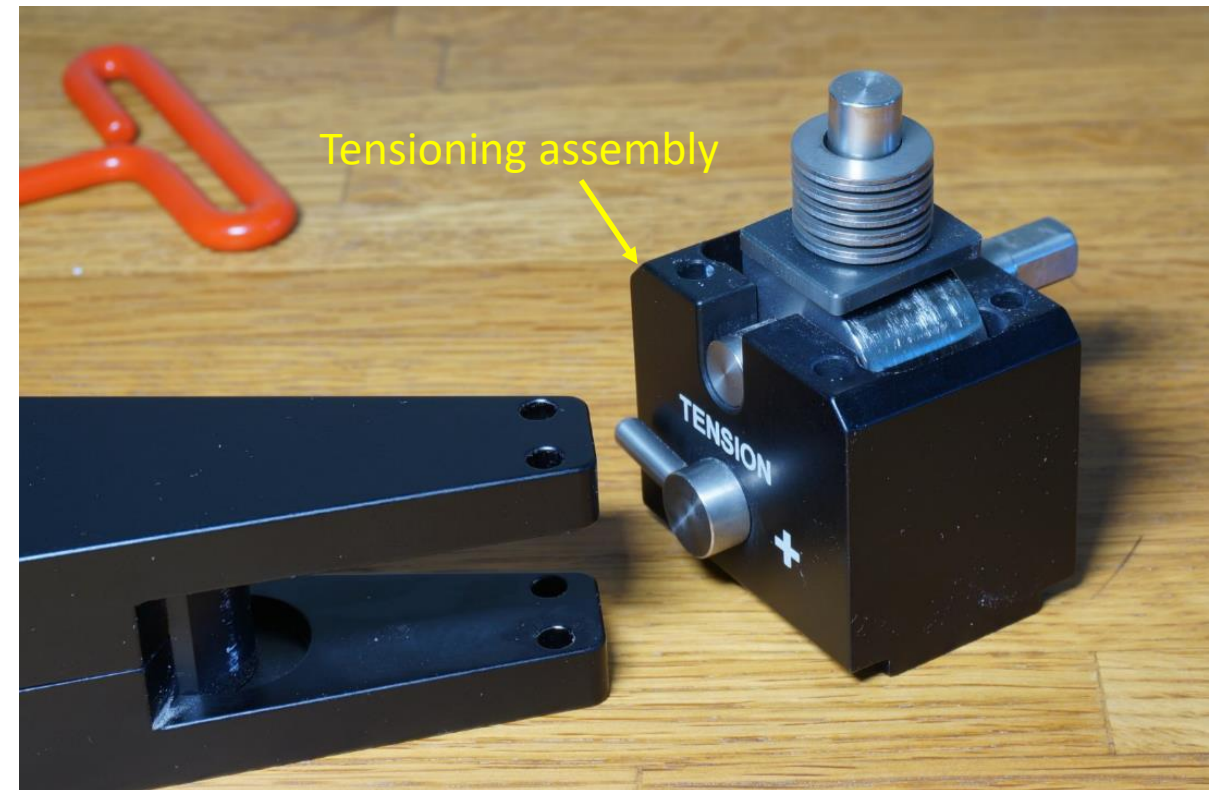
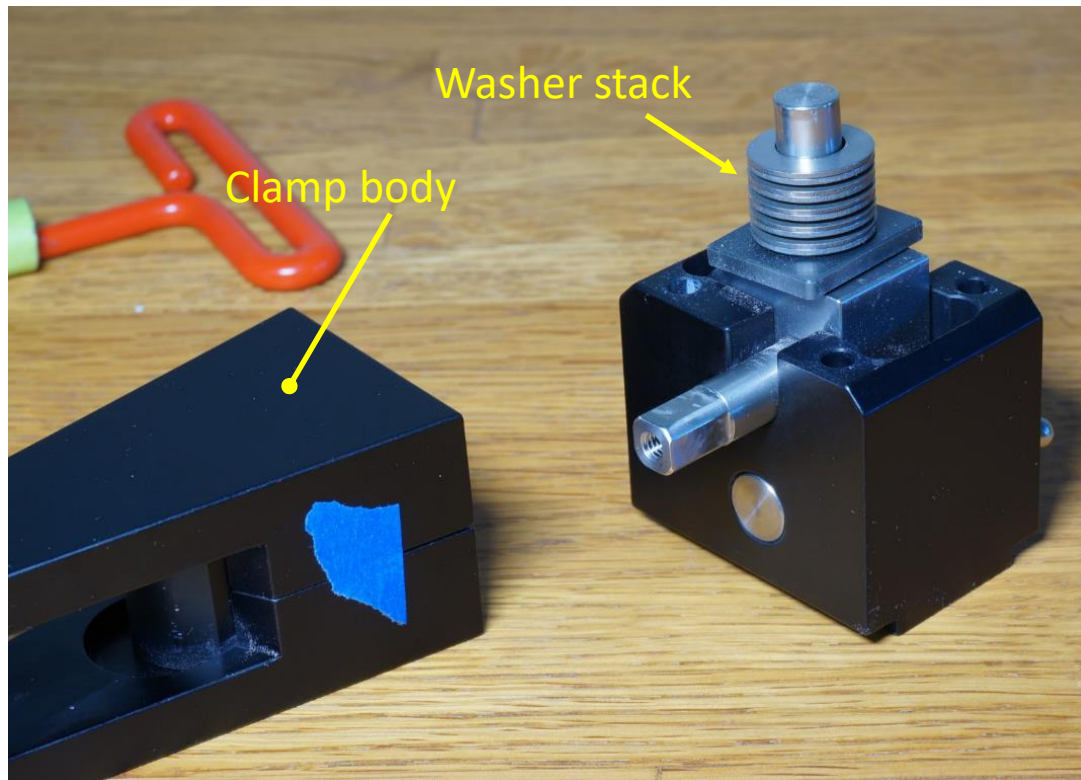


NOTE: When re-assembling these, align the inside faces and place the spring in the matching hole in the other jaw and squeeze them together with your fingers. This will seat the spring in the other clamp jaw.

NOW remove the 4 allen bolts, but hold the clamp body and the tensioning assembly together as you do this, and carefully set the whole thing so it's standing on its bottom.

Next remove the green tape (leave the blue tape for now) and carefully lift the clamp body off the tensioning assembly. If all goes well, it will look like this (the washer stack is just resting on the cam lobe, so this is why some care is recommended).

Note that the washer stack is on a rectangular pedestal, and the long side goes across the cam lobe. The clamp won't work on re-assembly if you orient the washer pedestal the other way.



The washer pedestal just lifts off the cam lobe.
Set it aside. The cam lobe also just lifts out.



A couple photos of the cam from different angles:



When you lift out the cam, you'll notice 2 brass pins at the location pointed to by the **orange arrows** (*in normal operation, these press up on the cam shaft via the tension level*).

Remove those (*you can turn the unit over and tap it on something cushioned and they will fall out, or if not, maybe use tweezers to remove the brass pins*).

Note that I had some metal filings when I took mine out. I didn't remove the tension lever shaft, and I just took a vacuum with a brush attachment and sucked out any remaining filings while moving the tension lever.

Then I took a Q-tip and inserted it where the brass bullets were, and twisted the Q-tip while also moving the tension lever back and forth. It took a couple Q-tips on each side before the slot the brass bullet rides in was clean.

Clean any debris from the rest of the outer surfaces of the tensioning mechanism. Then clean the brass bullets and re-insert, with the bull-nose side down. Then clean the cam and re-insert it.



Paying attention to the orientation of the washers (they are not flat; they have a crown on one side), remove them from the pedestal and clean the pedestal and all the washers. Then re-install the washers on the pedestal.

The Belleville washers (*aka* conical spring washers) are paired (crown side out), then re-installed on the pedestal (you'll see a space between each pair when re-installed, due to the crown)



Turning now to the clamp body, remove the tape and separate it in half. There is a bull-nose piece in the middle (I believe this is called the cam follower) that slides up and down in milled slots in the clamp side pieces. Clean all these pieces thoroughly then re-assemble and re-tape.



Underside of the clamp body (note the recess where the washer stack will insert in the cam follower):



Underside of the cam follower:



To re-assemble, set the washer stack on the cam lobe (remember the orientation matters), re-assemble the clamp body (including the cam follower) and tape it together. Then carefully set the clamp body onto the tensioner assembly with the washer stack in place (it takes some patience). Once that is aligned, tape the clamp body to the tensioner body to help hold it in place, then install the 4 allen bolts. Then re-install the clamp jaws/pins into the clamp body, and install the clamp lever. All done.

