Once we have taken out the worn parts we will reinstall the new chamber ring. To do this, notice they are marked from the factory with an arrow pointing up. We want this end to be up. To do this, line these grooves here with the part of the chamber where the sample comes out, as you see here. You probably want a half a centimeter clearance either side of this outlet here. Push it down; making sure this gap stays flush in line with the top of the chamber. Most of the time, you can push it in by hand. But if you need to use a hammer or some other tool, don’t ever hit directly on the metal itself. Use a block of wood or something of that nature to tap it into place as shown. If you do hammer directly on the metal surface it can be damaged and can cause the grinder to malfunction.

Now we are ready to reinstall the screen. It goes in like this and slides into place. Similarly if necessary, tap it into place with a piece of wood.

Next we will reinstall the impeller. Notice the flat surface on one side of the impeller shaft. The set screw needs to go into the flat surface. Slide it over the impeller shaft and line the set screw with the flat surface and tighten down the set screw with an Allen wrench, being careful not to break the wrench, because it is thin metal.

Then we put the cyclone air separator back into place.
Now we are ready to put the top back on the chamber and can begin grinding samples. To put the top back on, notice there are two pegs and two holes here. Line the pegs and the holes up and place the top down. Lift the clamp up and turn clockwise and it tightens down. It is always a good idea to go diagonally across the chamber top. Start with this clamp and do the clamp across from it. What this does is reduces the unnecessary torsion on the chamber top.

Now we can plug the sample mill back in and we are ready to mill samples.