

## Recopper armature electrolysis. (part 2/4)

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In part two we are going to prepare the armature.

The first thing to do is cut your com on a lathe so that it has a clean cut. Now clean it with motor spray. Clean the slots between the commutators so that it is clean and no brush compound is in there. I also clean the com with acetone.

Now you need to get some scrap lexan that you have laying around. Cut 3 square pieces that will fit in the com slots so that the copper will not close these. Now we need a piece of rubber (I use the one to remove pencil writing). Drill a hole in the center of the rubber so that the shaft will fit in it. I use a 3 mm drill bit.

Sometimes the lexan will not fit tightly into the com slots so I make 3 cuts that line up with the com slots in the rubber. This way I have more control over the lexan. See the picture below. You can see the lexan entering into the rubber. Make sure the com stands flat on the rubber so that the copper does not grow on the bottom but it creates a nice flat surface.

Once you have done this we need to cover the top of the com with nail polish. We need to do this so that copper does not attach itself to the top but only the part that has been cut on the lathe. Since this is your first time use a black color so that you can see where the nail polish has been applied. If it gets on the com use acetone to remove it or else you will end up with holes.

Now we need some copper wire. We need to turn the copper wire around the top of the com where the copper wire from the armature has been soldered on the com. Make sure that the wire does not interfere with the lexan pieces. Now on the end of this wire you need to place the resistor.

Get the plastic tupperware basin. We need to put a piece of square lexan  $\frac{1}{4}$  from the anode side. This will prevent that the side that is closed to the anode will grow faster than the rest. Glue this to the bottom of the basin. See picture.

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Now we are ready to move to part 3.