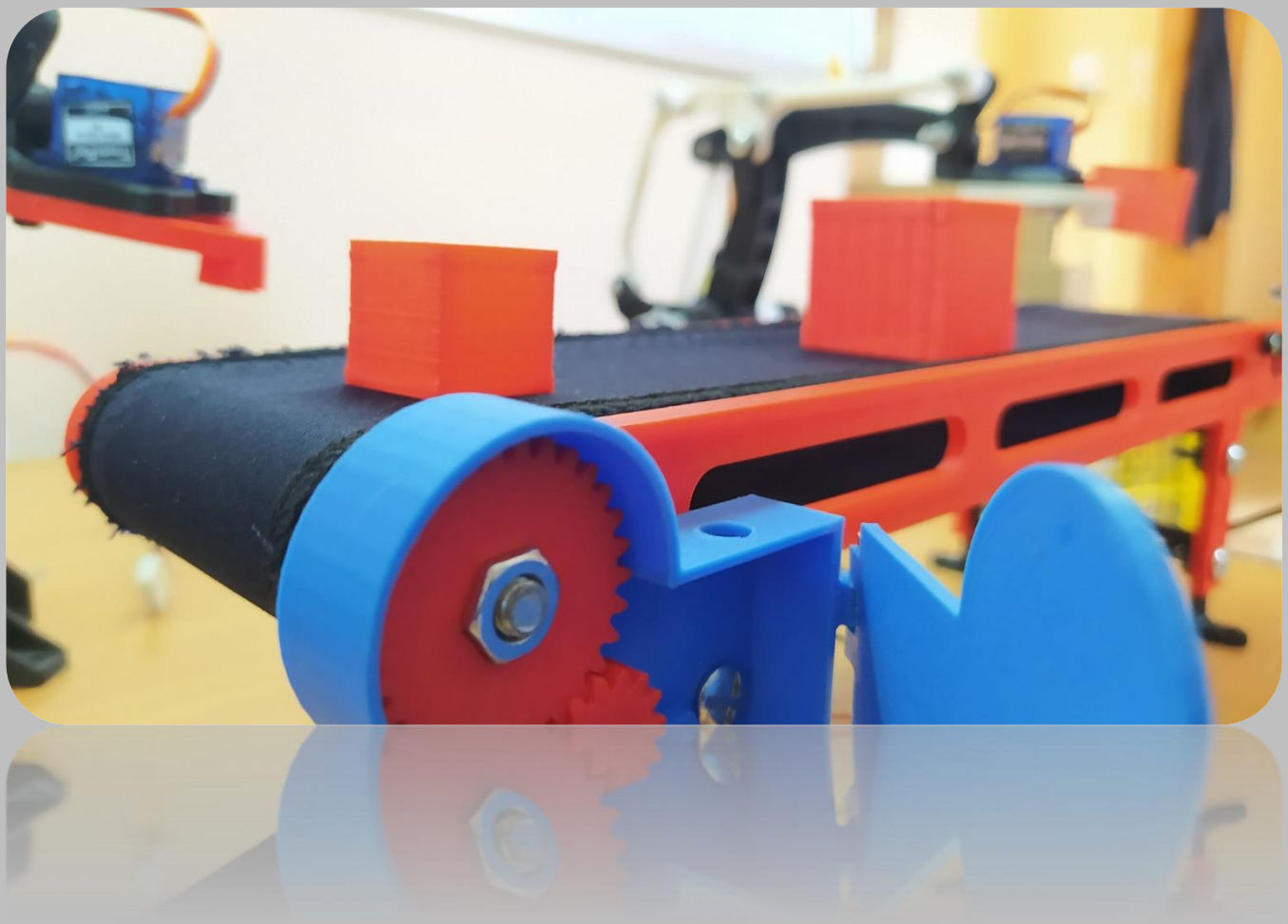
Conveyor (conveyor belt)

by

OUCHENE ABDELHAK



https://www.facebook.com/audi.gtspyder

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3d printing settings

I used PLA 0.4 nozzle

For the printer I used ender 3 and Anycubic Chiron

*** For the layer Hight 0.3mm for the most of the parts**

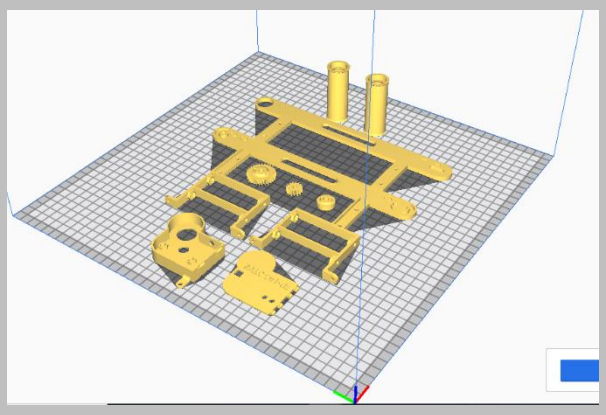
except the gear box 0.2 mm and for better result use the adaptive lair option (I use CURA)

***You need support just for coupling, the big gear and the sensor holder.**

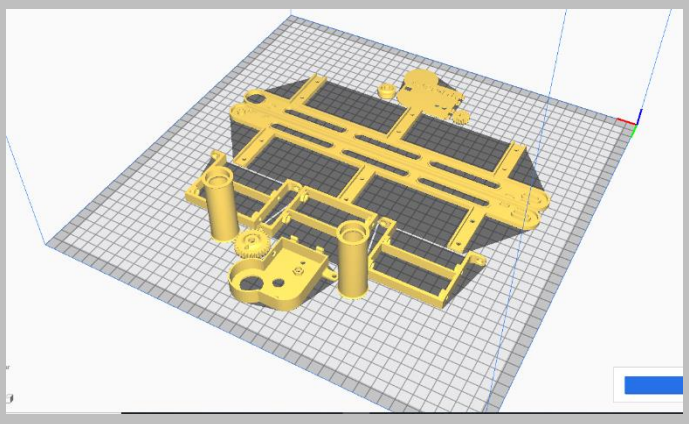
#don't forget to disable the horizontal expansion #

In the small one L you need 11 parts (without the holder of the IR sensor)

For longest one XL you need 12 (one more chassie for the middle) without the holder of the IR sensor



Small Conveyor (L)



Longest Conveyor (XL)

In this photo I put all the pieces in one base just to show you the number that you need in each version L and XL

the program of the steeper motor you will find in YouTube

just right Stepper motor 28byj-48

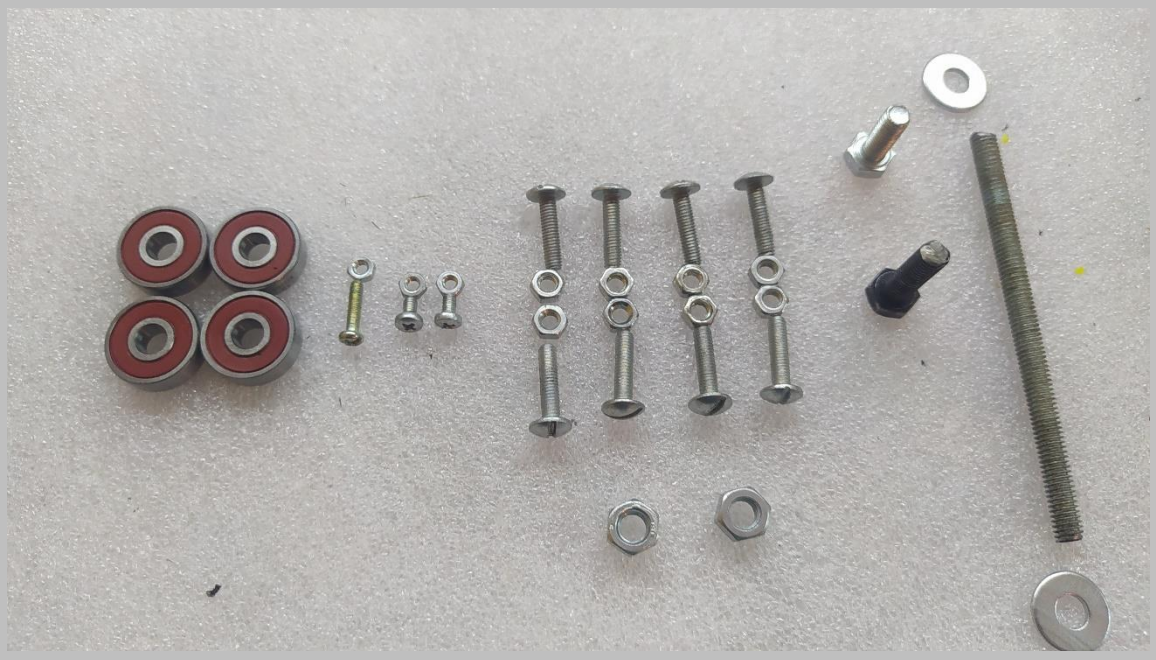
Assembly

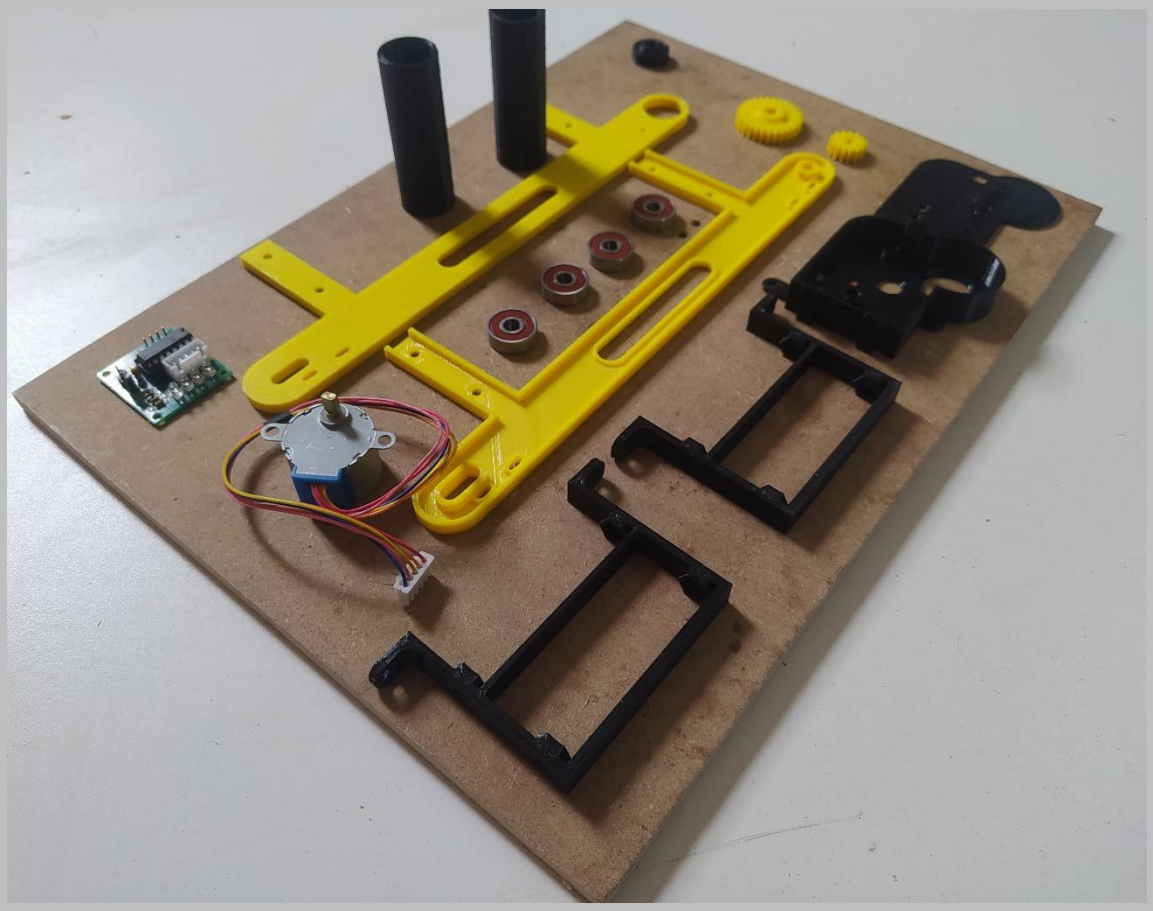
* There is a small video for exploded animation for the conveyor you will understand the assembly and follow the steps below

- **List of bolt, nuts, bearings and other stuff needed**

1. **Stepper motor 28byj-48**
2. **Arduino (nano or uno ...)**
3. **IR sensor (additional option)**
4. **x8 M4 bolt 25mm and x8 M4 nuts to fix the chassie to the right and left side**
5. **x3 M3 bolts and x3 M3 nuts (2 of them for fixing the stepper motor the other one to fix the gear box to crop)**
6. **x4 M6 nuts (one of them you press inside the big gear)**
7. **x2 bolt M6 20 mm in length**
8. **x1 bolt M6 85 mm in length**
9. **one or 2 washers for adjustment M6**
10. **x4 bearings 626-2Z Bearing (single row deep groove ball Øint: 6mm Øout: 19mm W: 6mm) you will find it in amazon or Alibaba...**
11. **Cloth (490mmto 520mm) for the small one (L) and for the longest version (XL) (600mm to 630mm) depends of the quality of the cloth for bater result use the inflexible cloth, and for the width 60mm both of them.**
12. **And of course, the hero of all the project mister glue.**

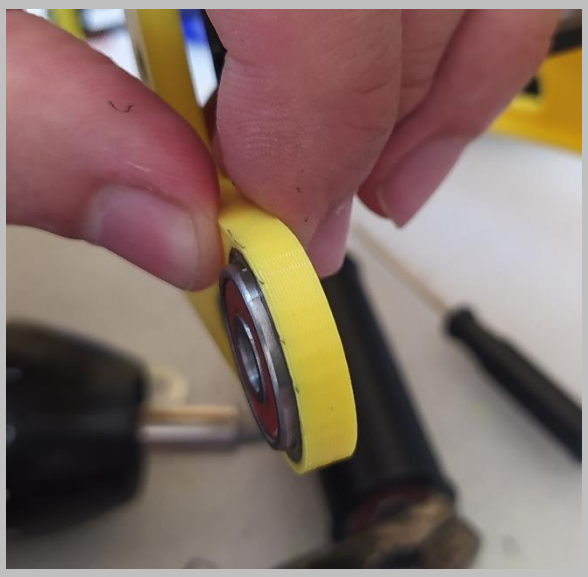
- **Let's start the assembly**

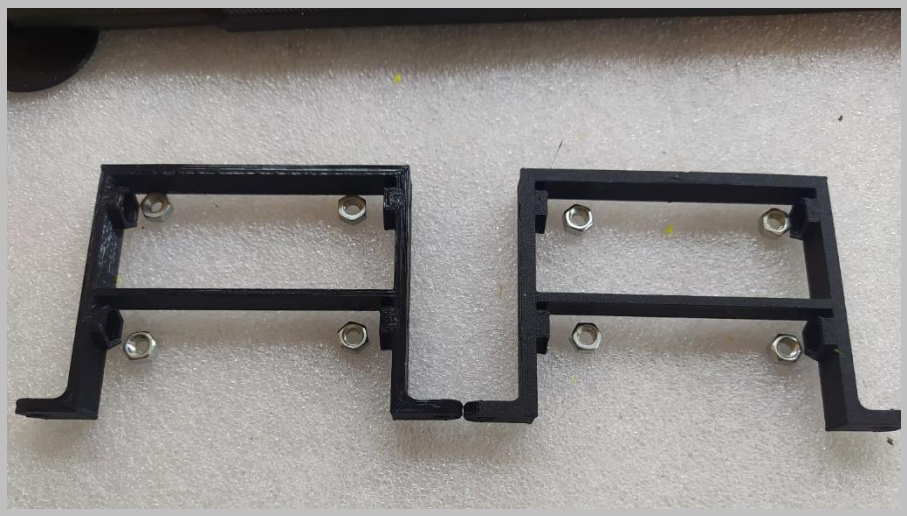




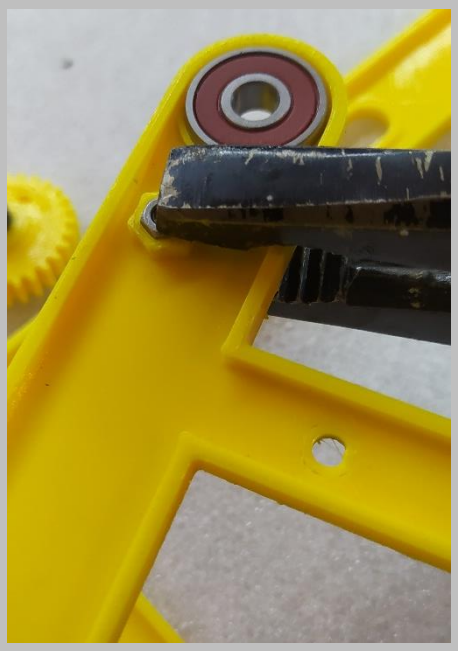
3d printed parts for the small version (L)

squeeze it in his place





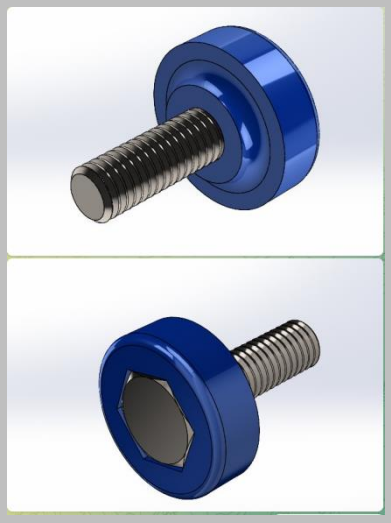
M4 nut



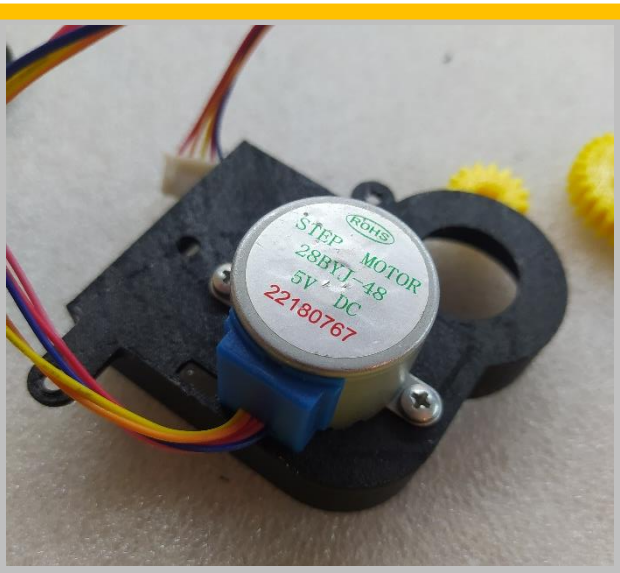
M3

M3

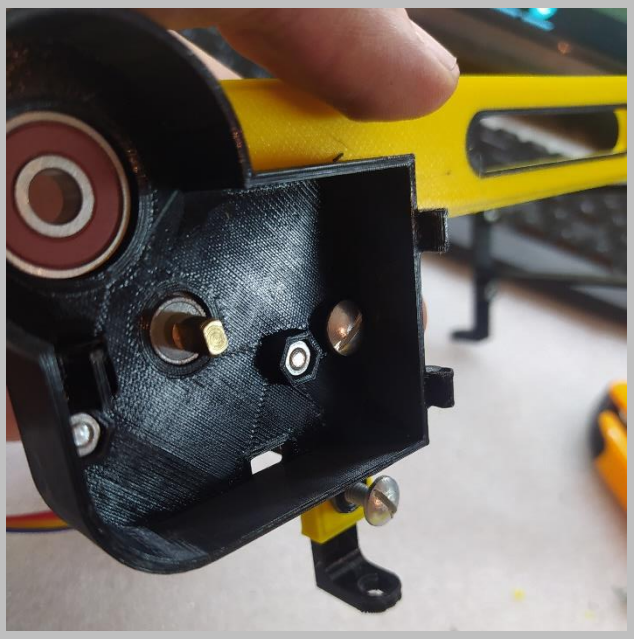
M6



For the coupling using the M6 25mm bolt



Fix the motor use the M3 bolt

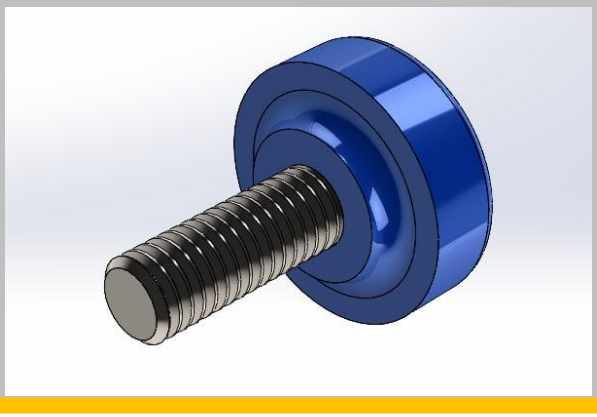


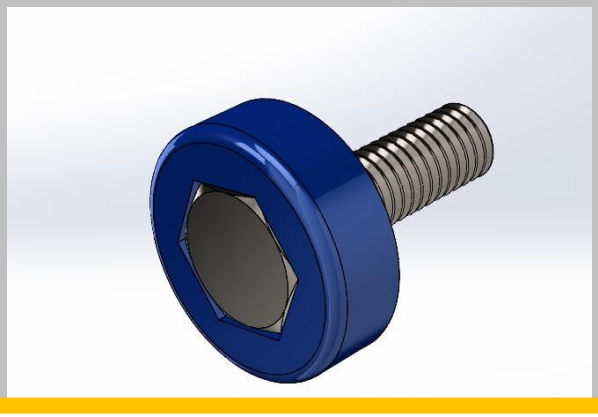
Fix the gear box use the M4 bolt

Fix the chassie and right side using the M4 bolt

Fix the bearings for the first one you don’t need glue for them

For the coupling we will use the glue to fix but before that





Don’t forget to put the bolt M6 20mm not a nut

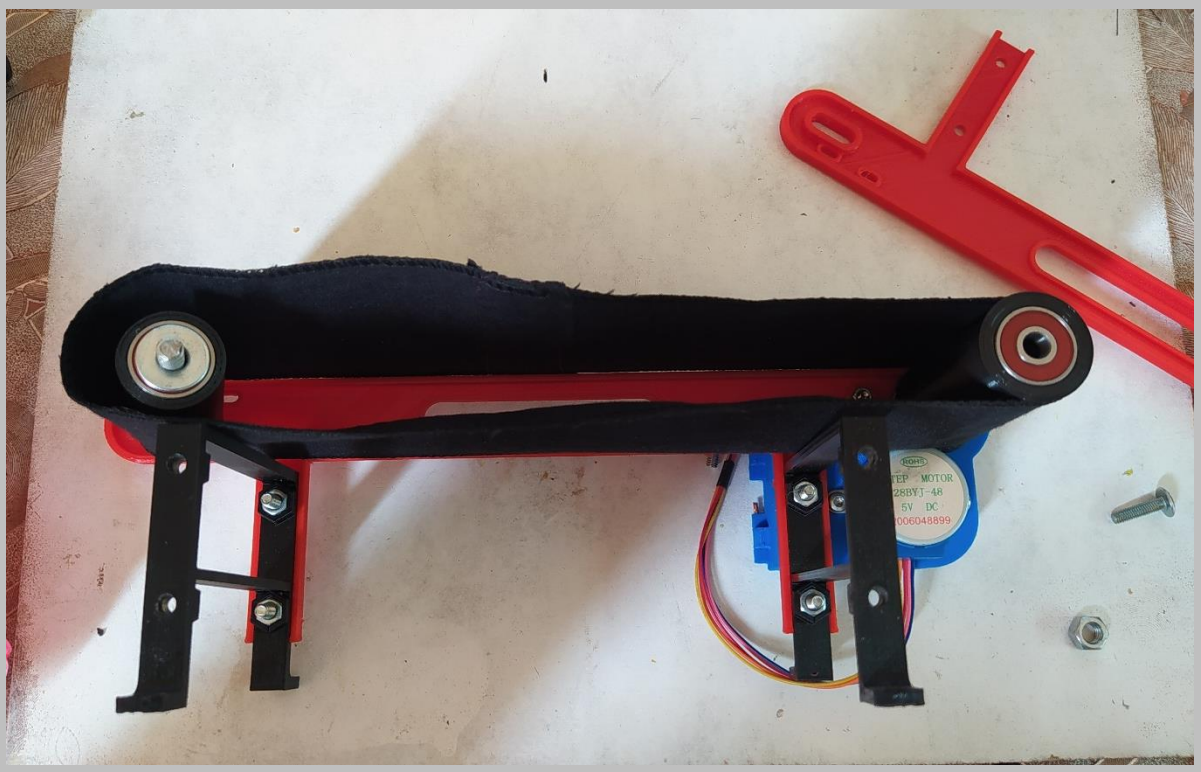
Before fix the other bearing you have to put the M6 20mm or 25mm bolt inside the roulou (cylinder)

Now Fix the bearings glue not required

When you flip the cylinder, the bolt will appear

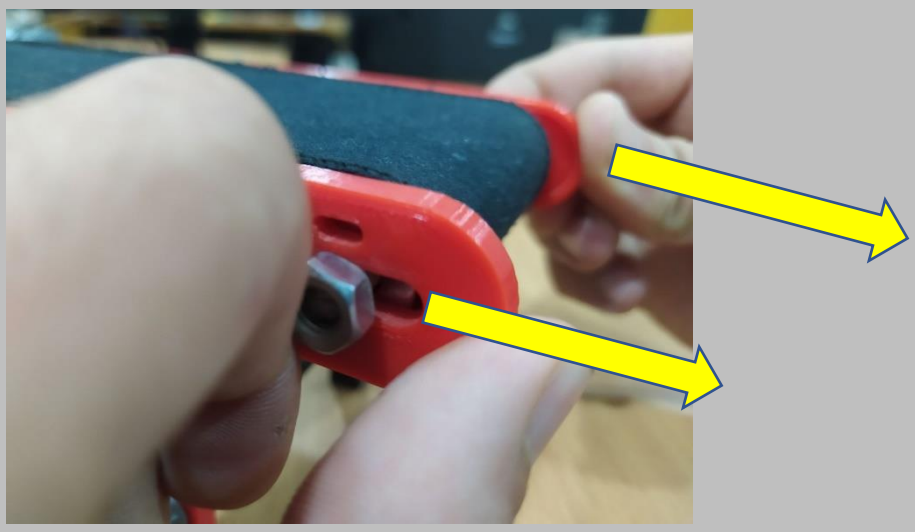
The belt or the cloth

Don’t forget the washers (tow washers)

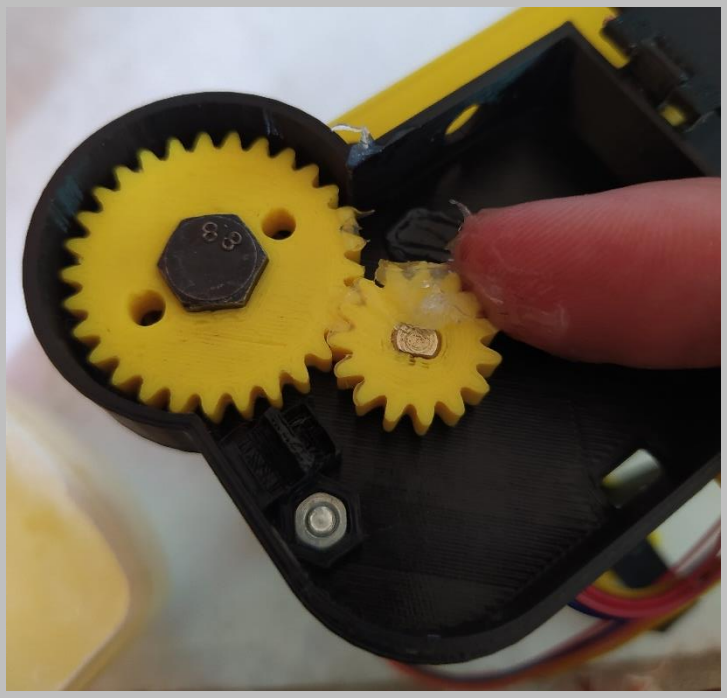


Now put on the cloth

Fix the second side with M6 nuts and M4 for the chassie bolts



Not too much



Fix the two gears starting with the big one

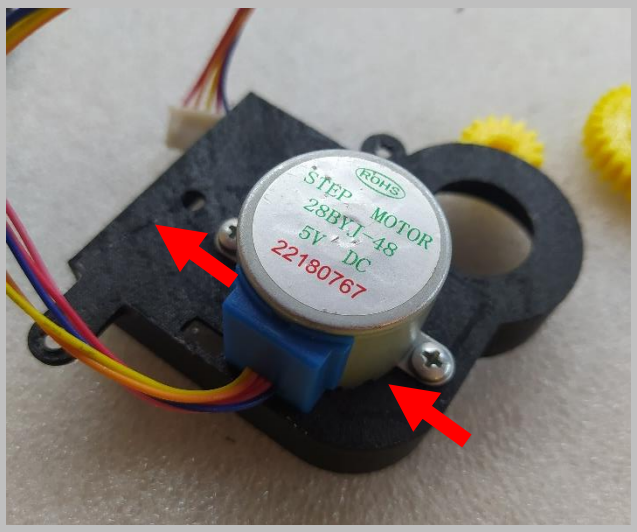
note well:

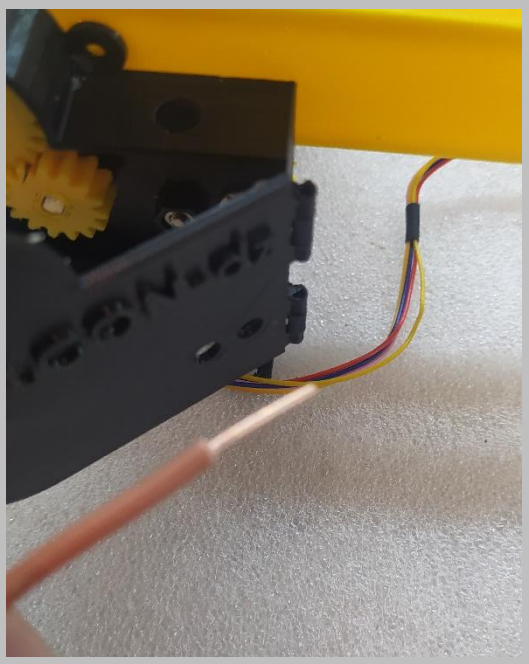
when you finish the assembly

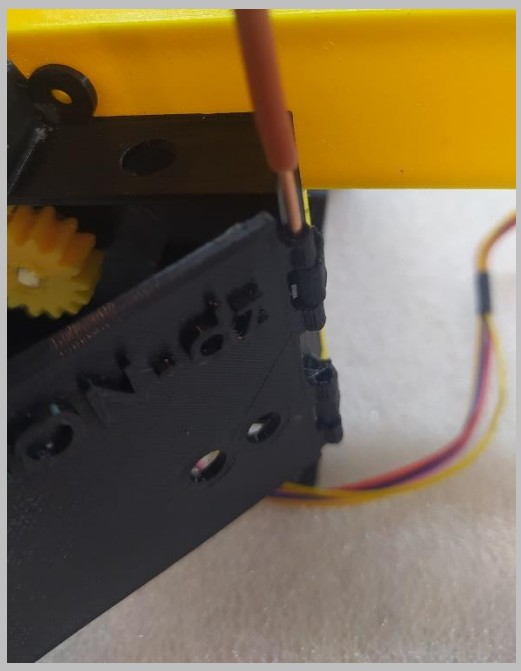
and when the motor start rotating

you have to adjust it by move it

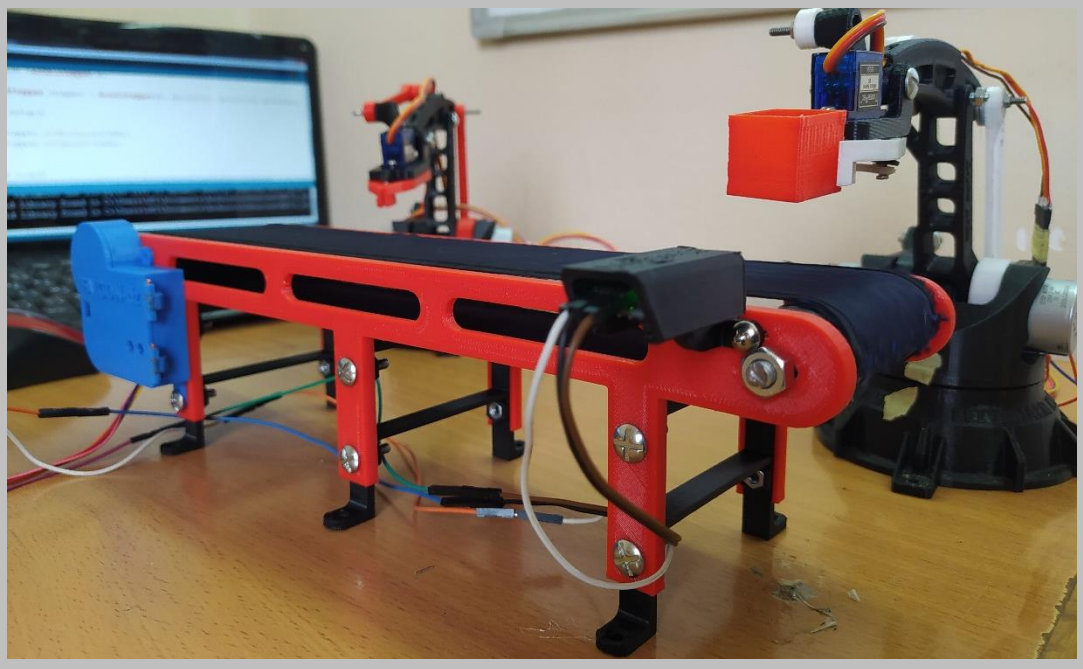
little bit to the left, try until the gears rotate smoothly





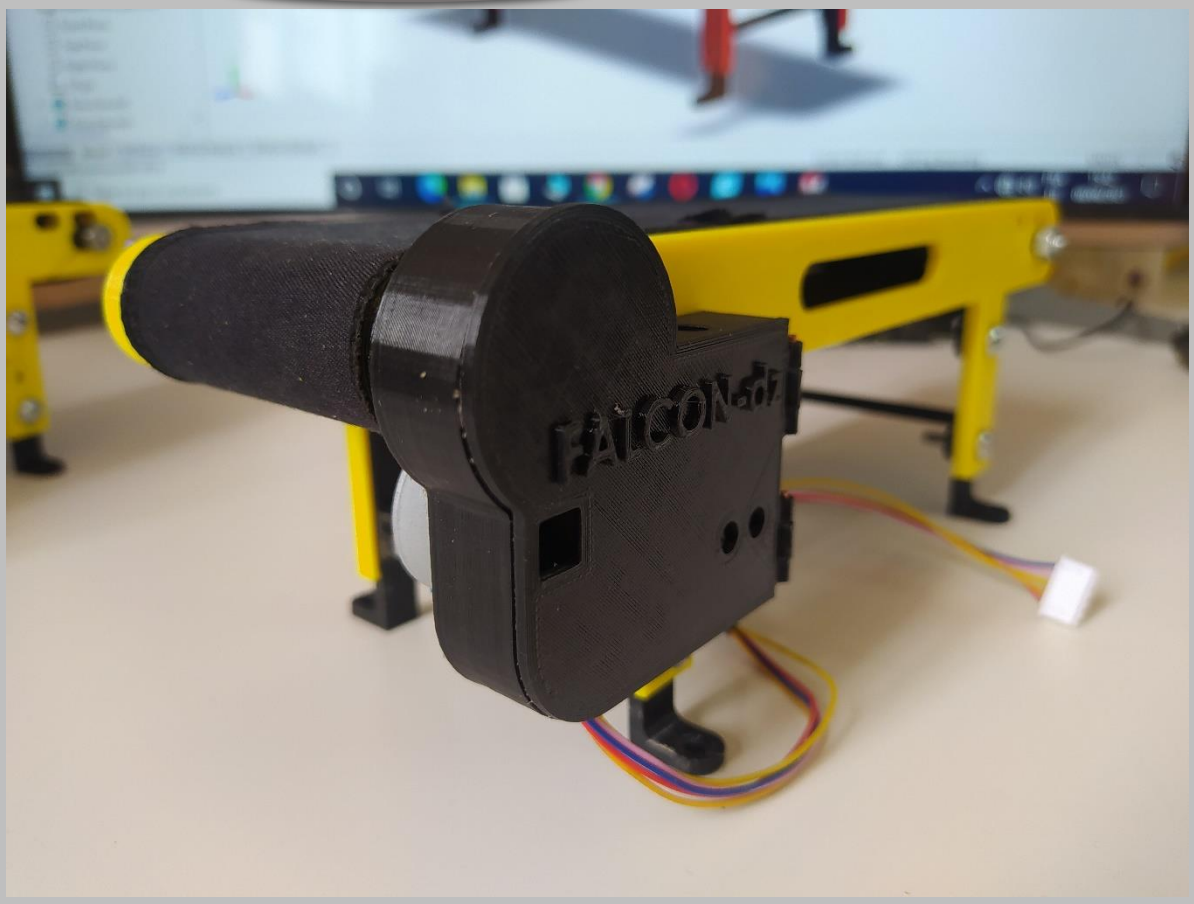


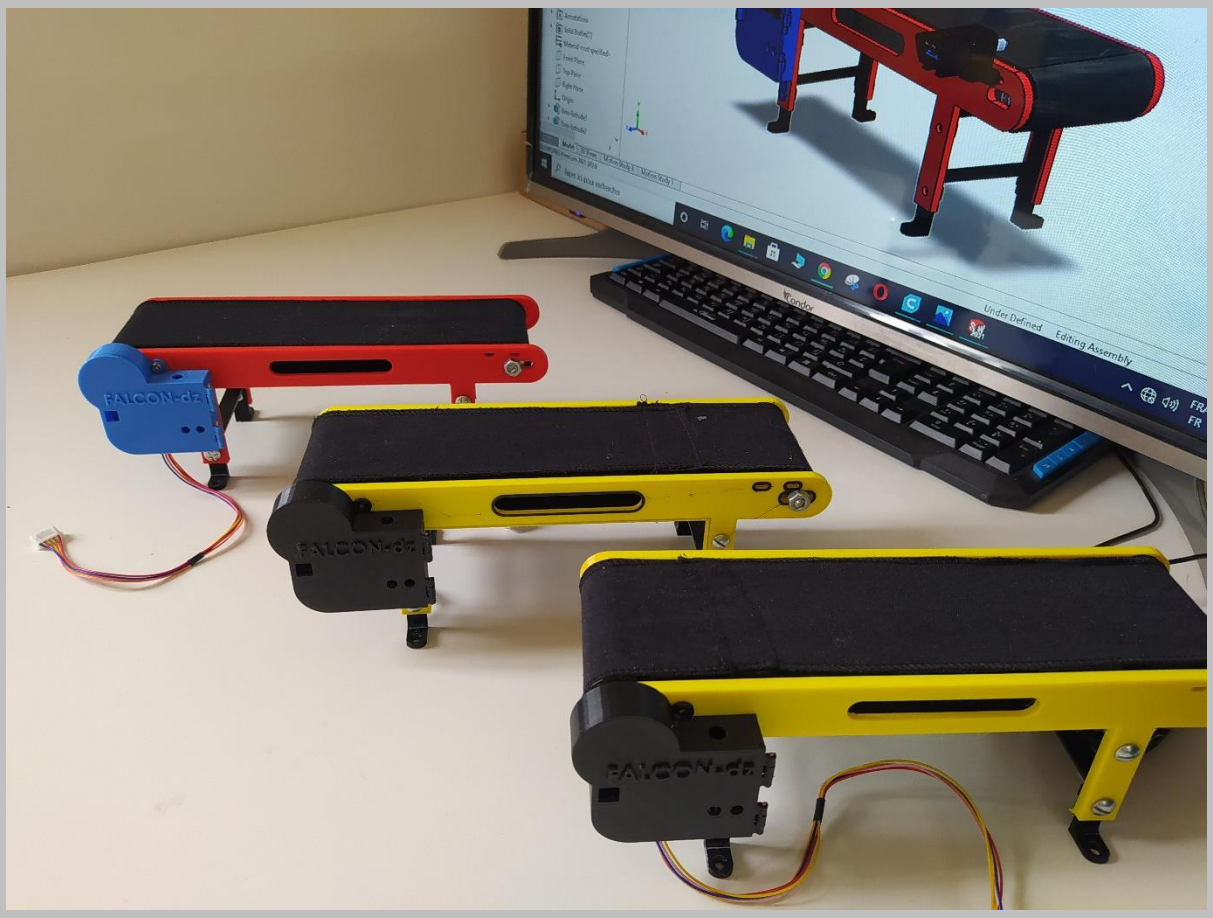
To fix the door use a wire of electricity or nail



The IR holder

congratulation





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