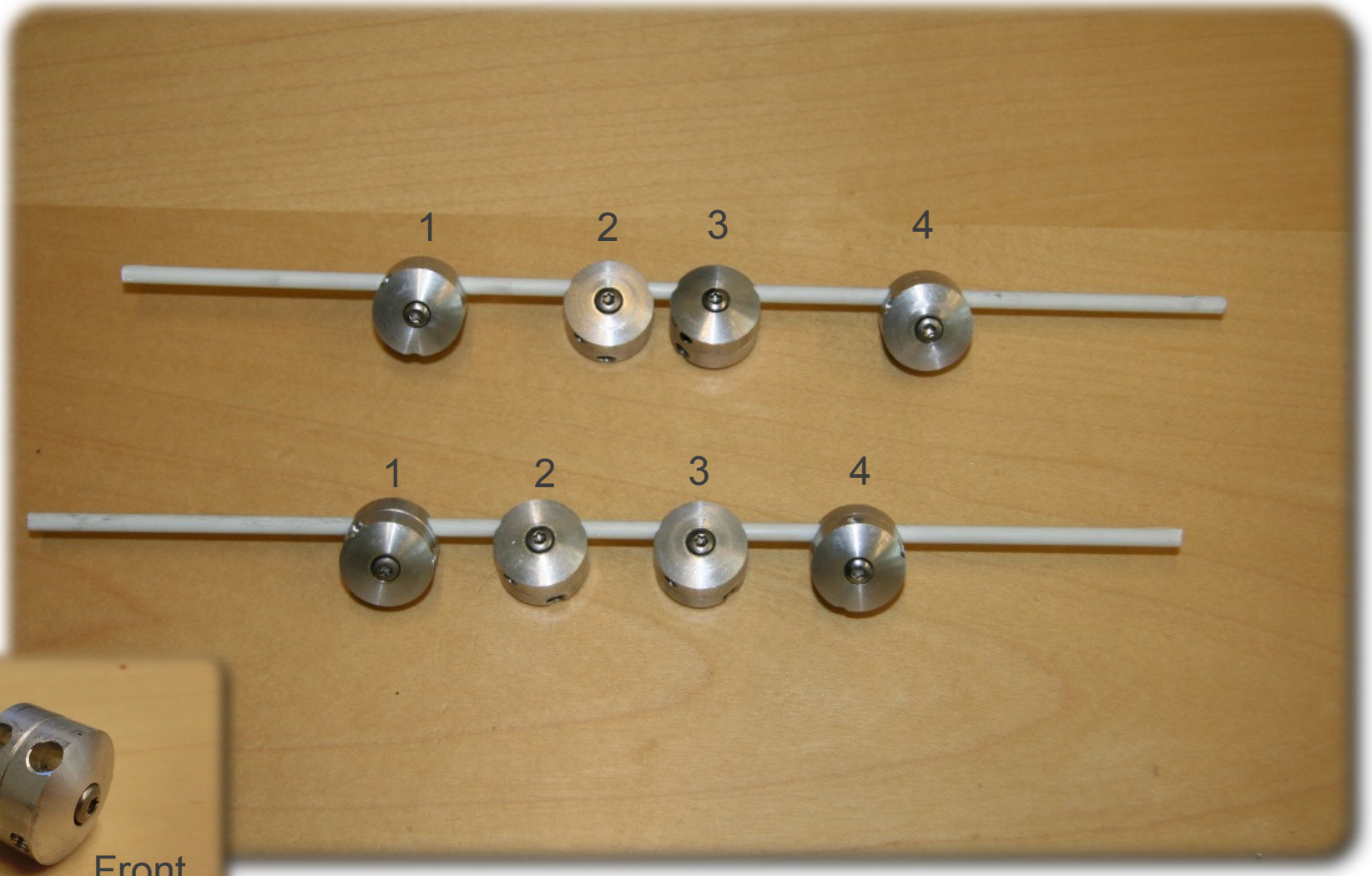
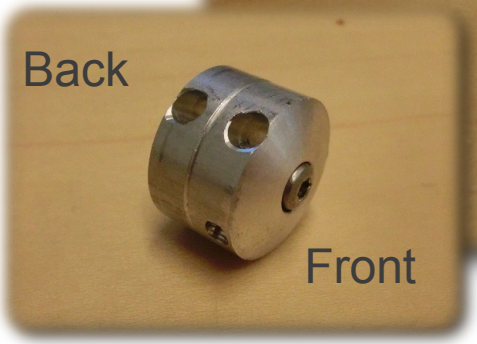
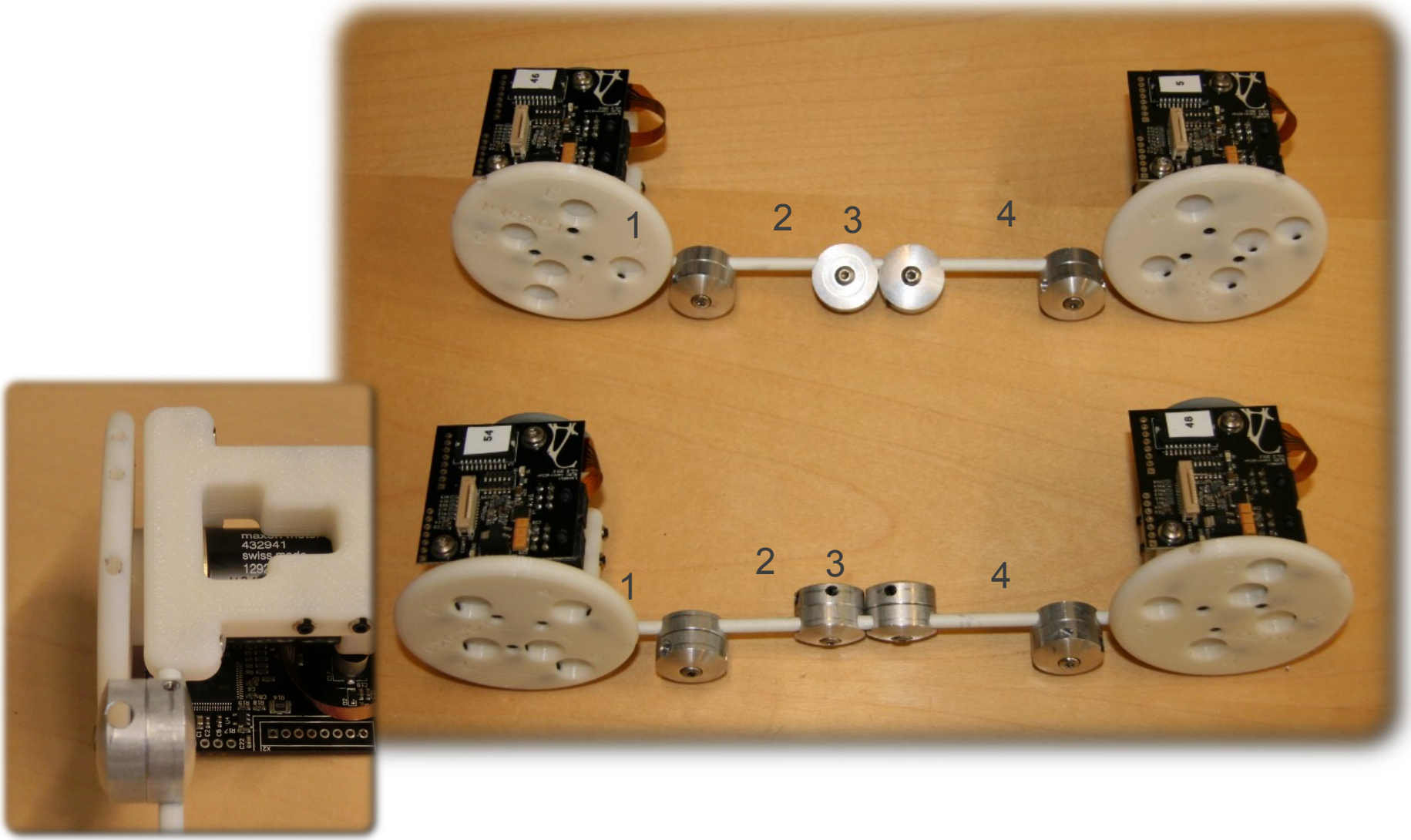
Construction guide to building SpringyBot

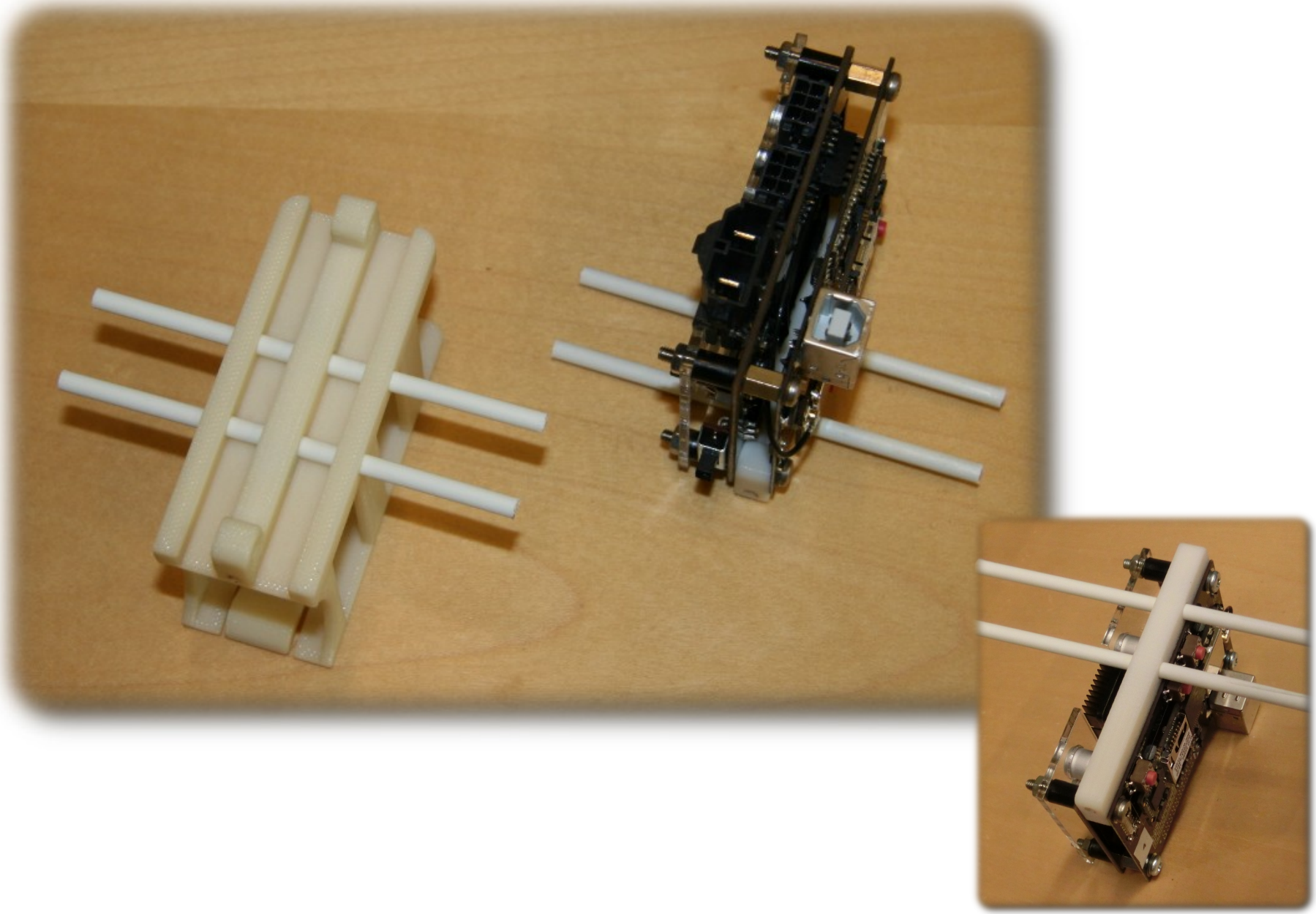




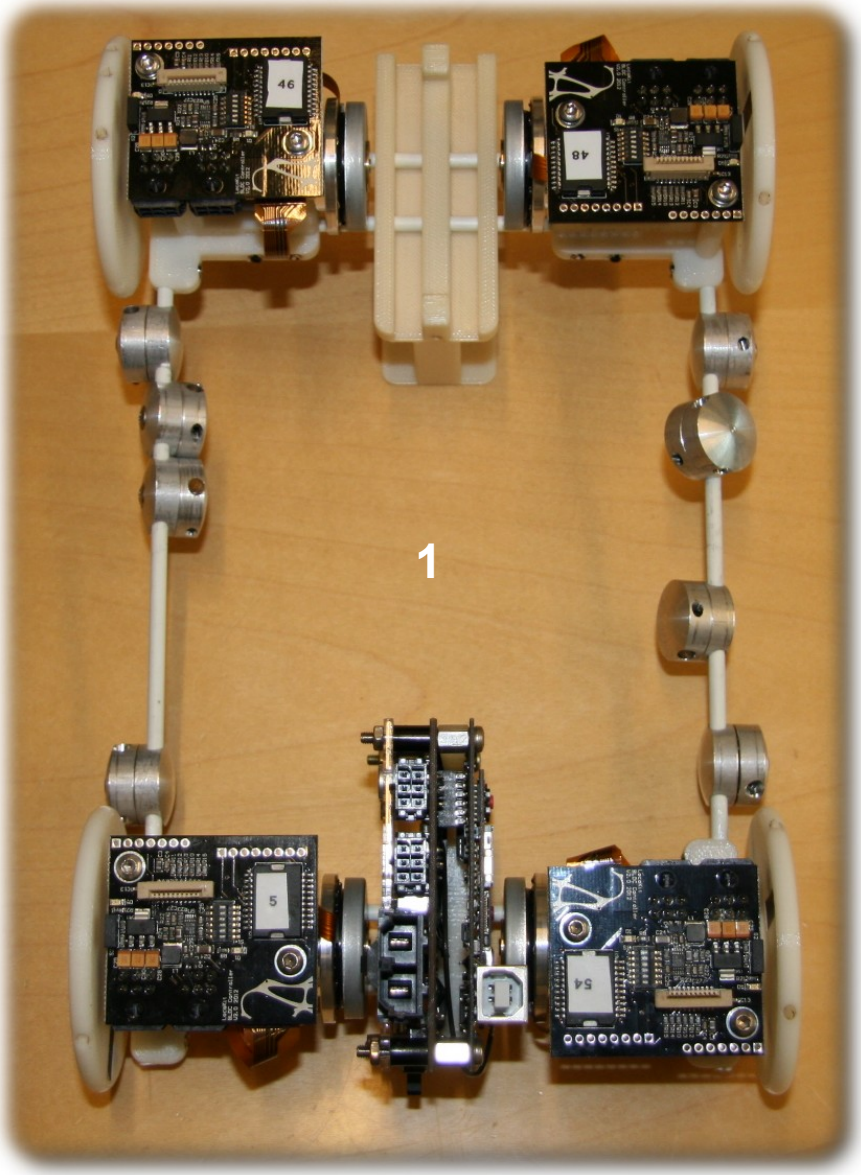
Use two rods of ~24,5 cm and mount 4 fixed joints on each. Fixed joint 1 and 4 should use back hole and 2 and 3 should be in front hole. The angle of joint 2 and 3 does not matter right now but joint 1 and 4 should be mounted in an aligned position, about 6 cm from the and of the rod.

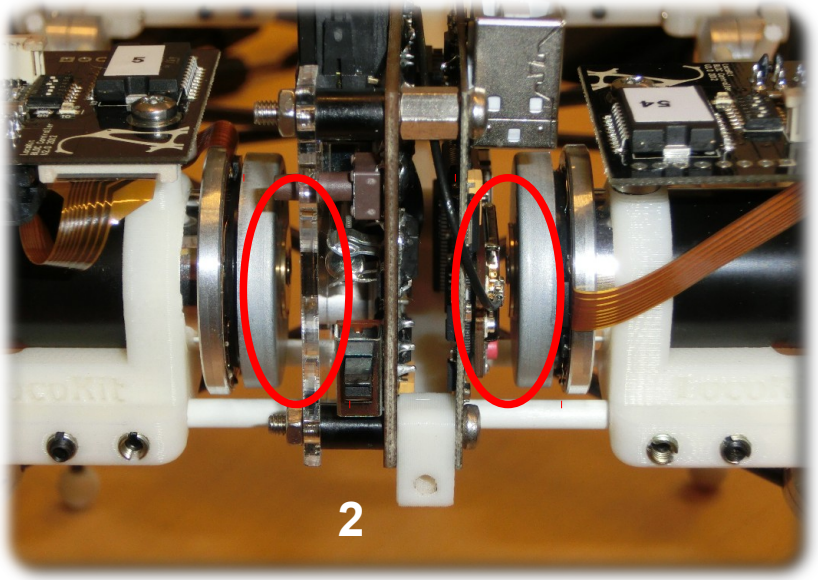


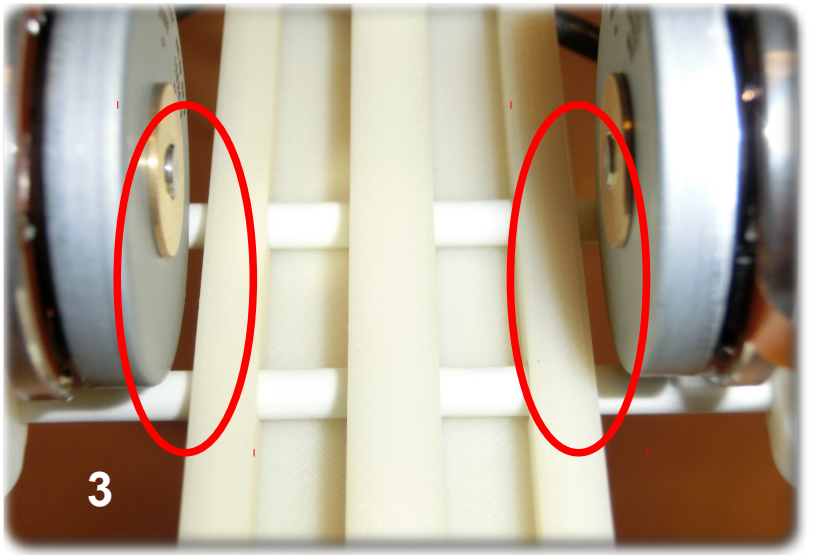
Put 2 motor modules on each rod, and make sure that joint 1 and 4 are aligned with the motor modules as on the picture.



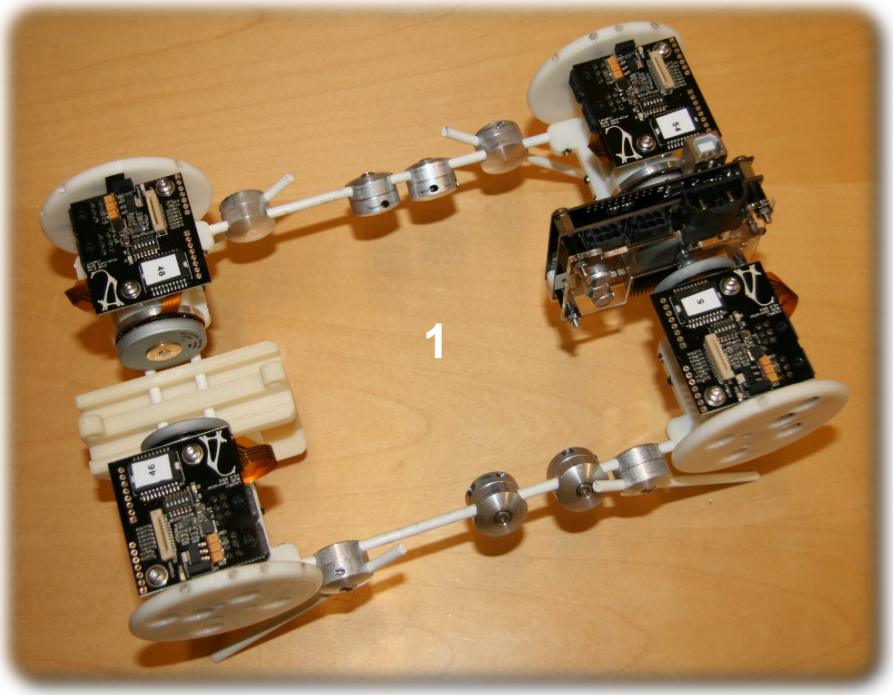
Mount 2 rods in the battery box and 2 in the Central Board. Mount both components centrally on the rods.

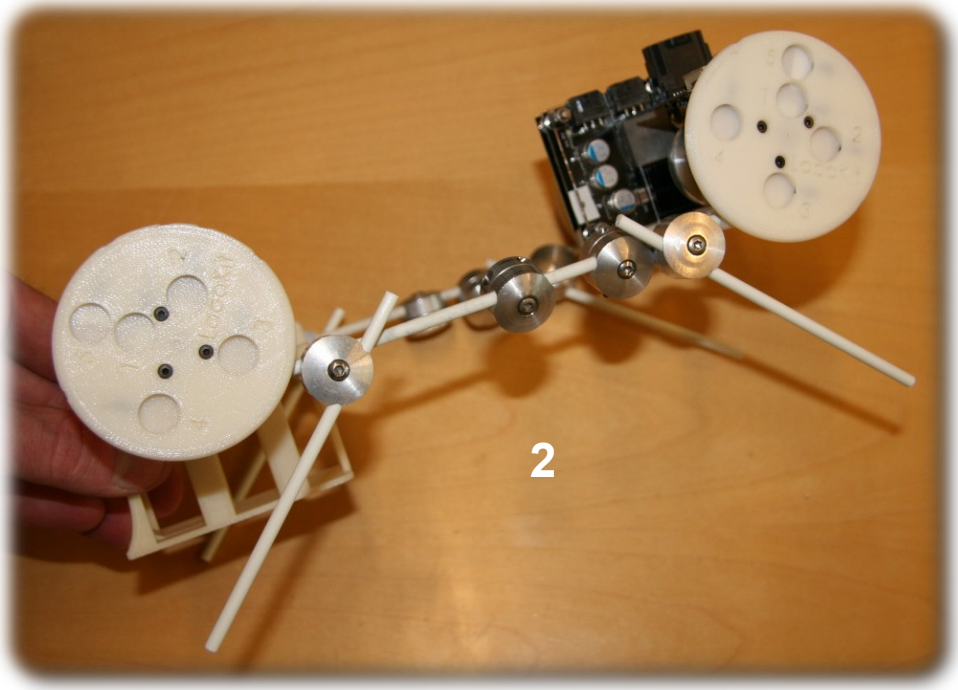




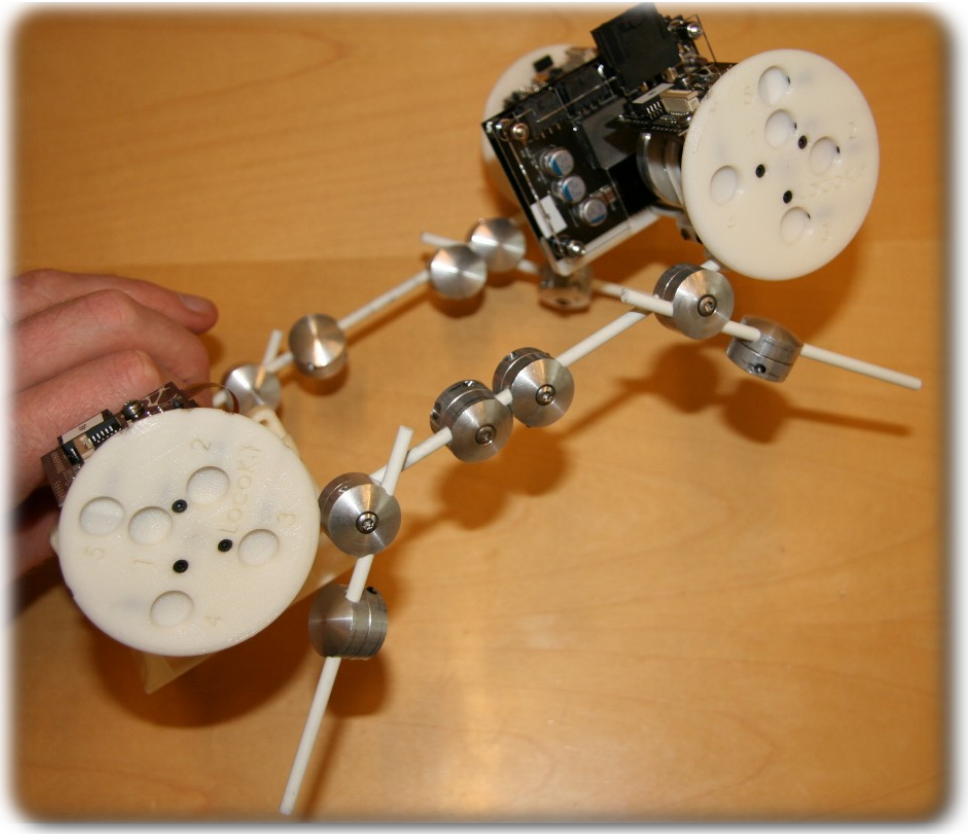


Take the two modules from page 3 and combine them with the two from page 4 as shown in figure 1. Make sure that there is clearance between the end shaft of the motors as shown in pictures 2 and 3.

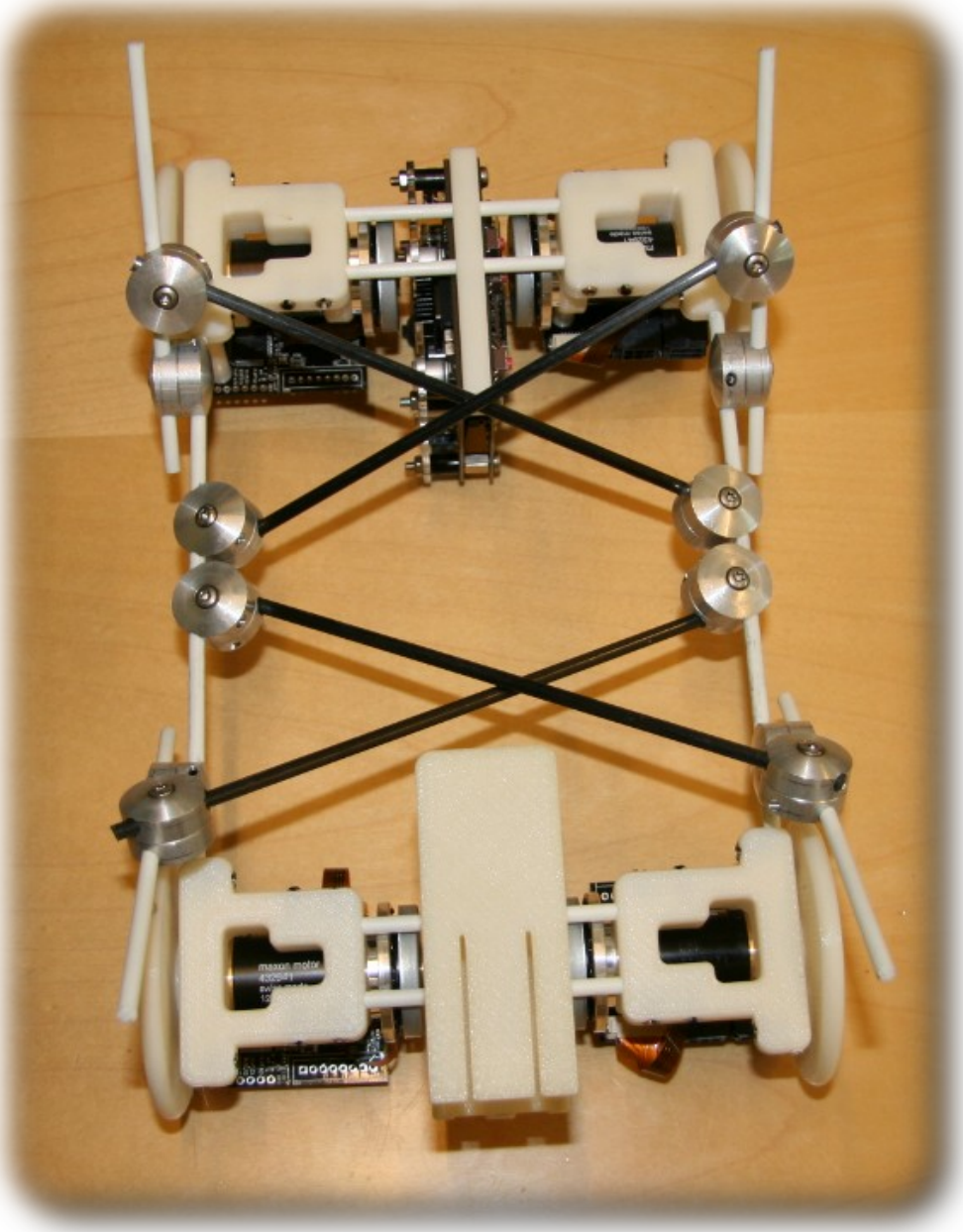


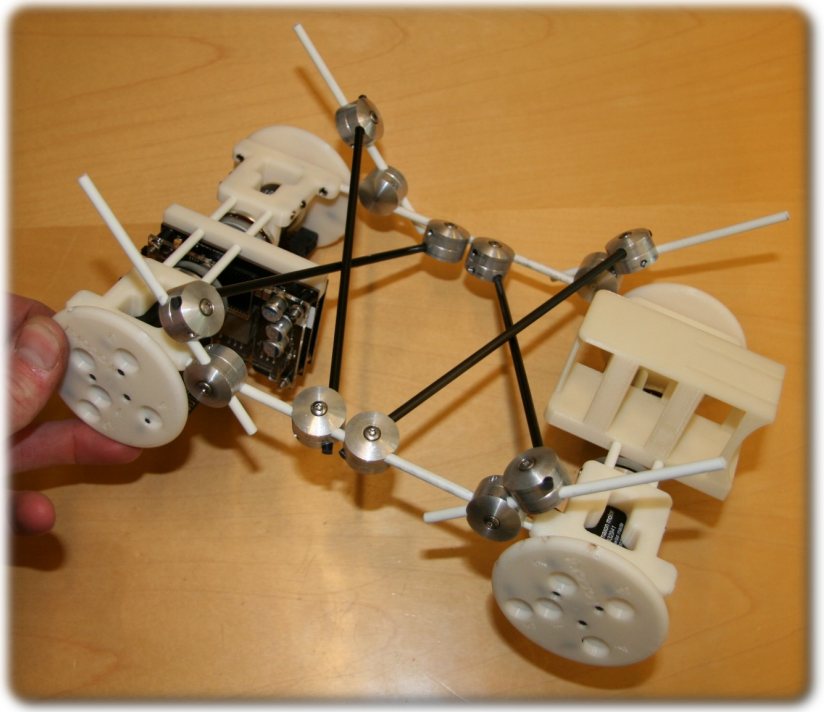


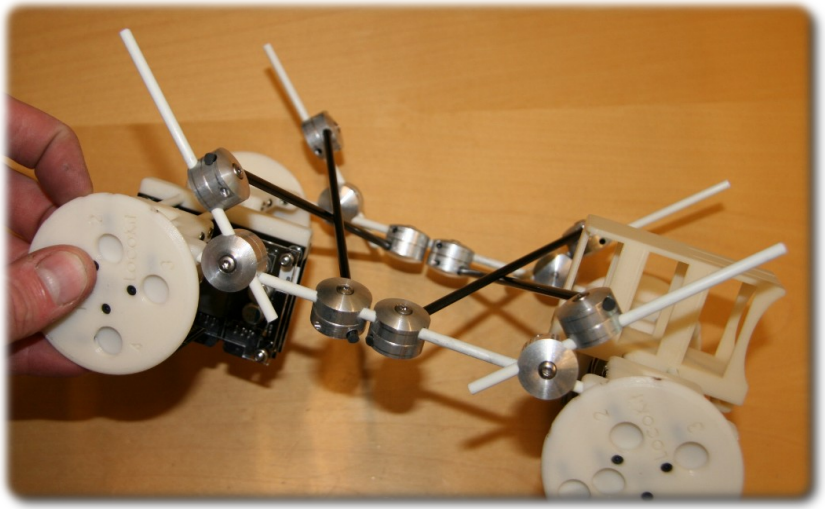
Find 4 rods of ~11cm and put them in fixed joint 1 and 4 on both sides (see page 3) and rotate the joint into a ~45 degree angle as shown in picture 2.



Mount 4 fixed joints on the 4 rods as show in the picture

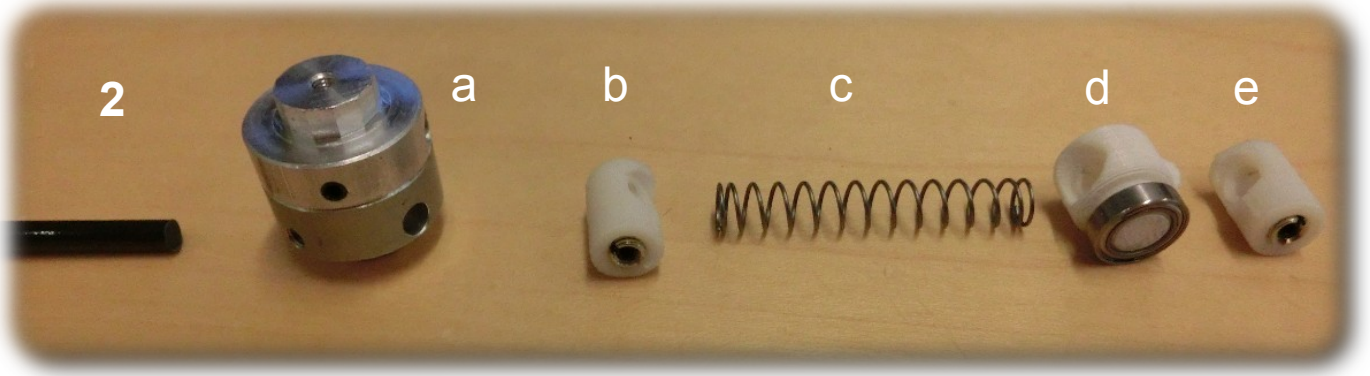


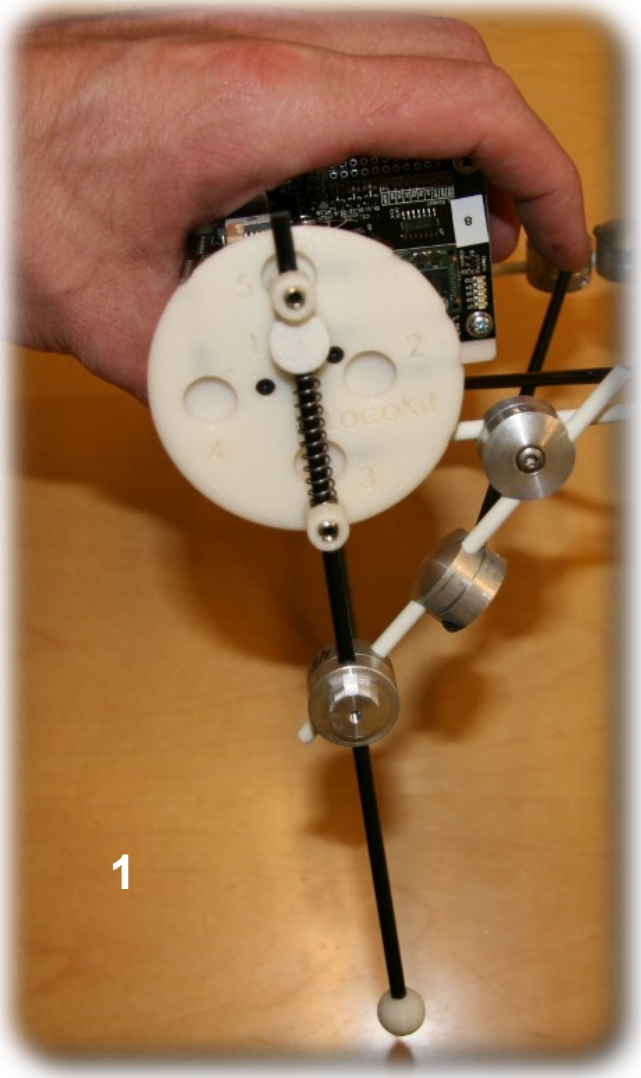


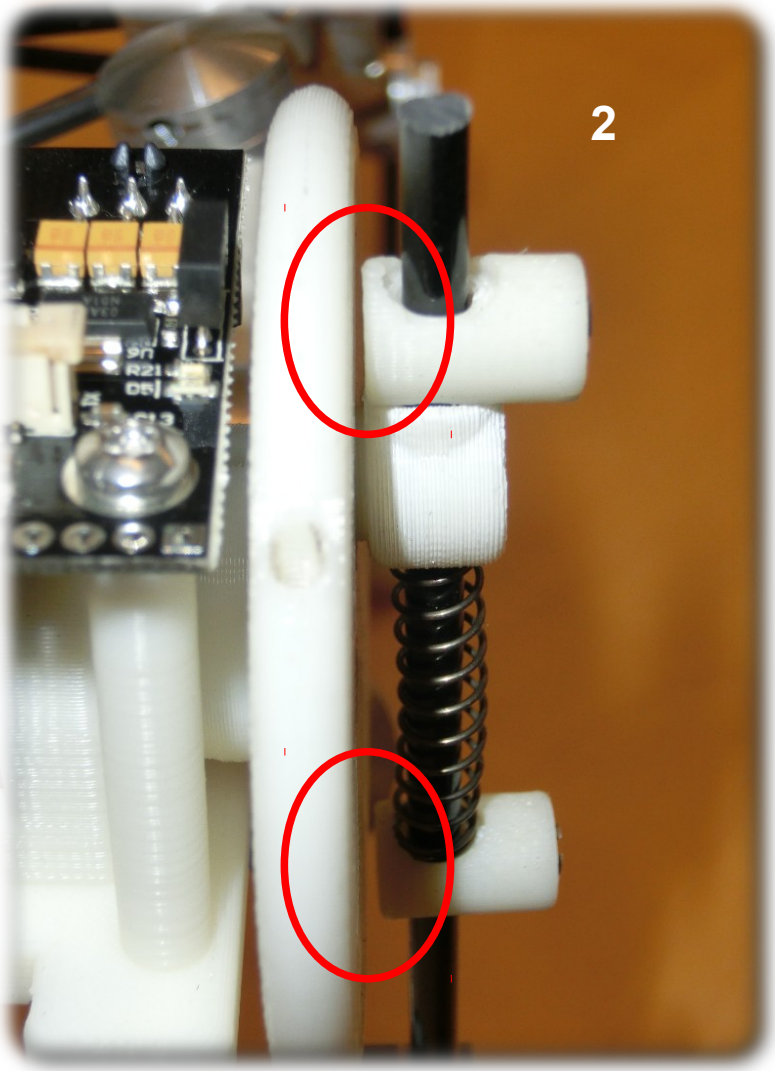


Find 4 black rods of ~17cm and mount them as crossbeams as shown in the pictures. Make sure that the 4 rods in ~45 degree angle is kept parallel with the white connection disk on the motor modules.

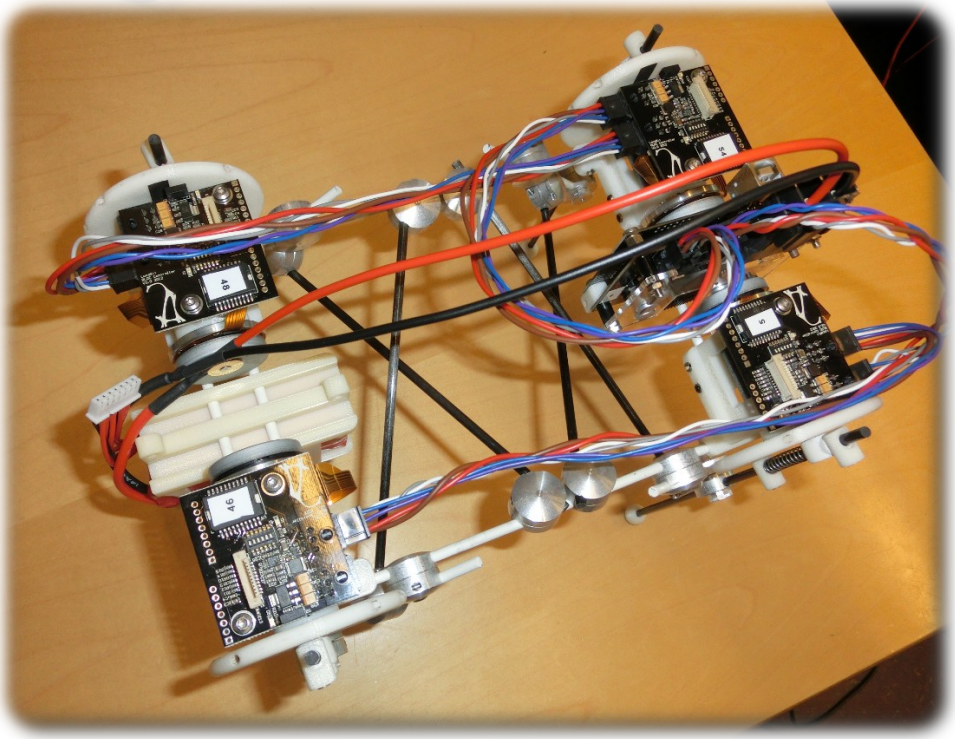
Now assemble 4 legs as shown in picture 1. To assemble a leg, you just slide the components shown in picture 2 onto the rod. Components “b” and “e” should not be over tighten. Component “a” should slide freely on the rod.

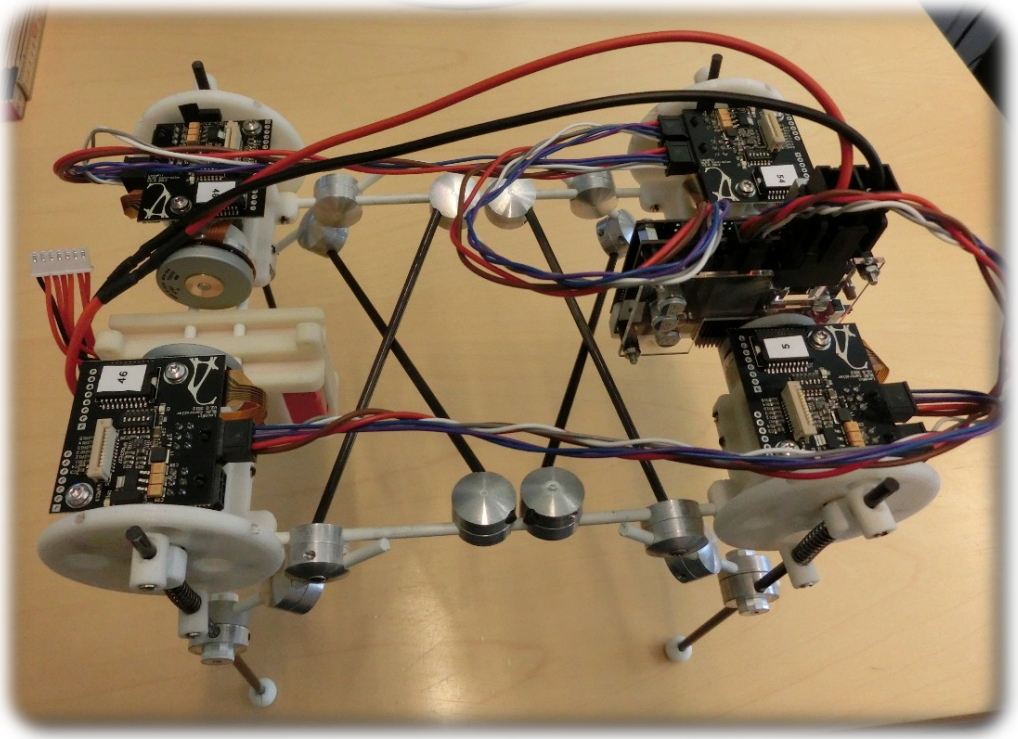






Now mount the 4 legs on the robot. Make sure that the leg have clearance at the two places marked in picture 2. To mount the leg on the connection disk on the motor, fasten the set screw for the particular hole





Now with the legs mounted, the only thing missing is the battery which you slide into the battery box and connect to the Central Board. Next you mount the 4 wires for the Motors. Use the 2 short ones between the Central Board and the motors next to it. Then connect the two other motors with the long cables from the 2 front motors. You can now power up the robot and connect to it through wifi.