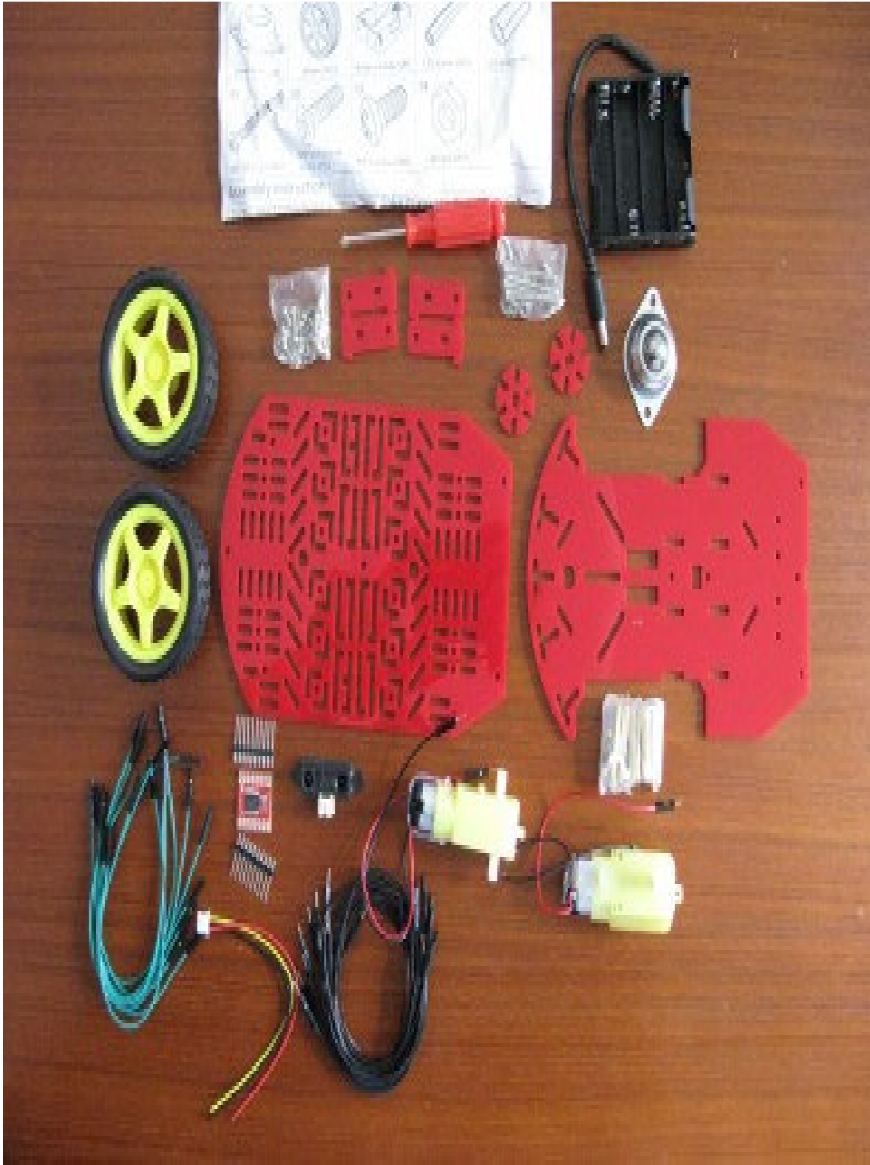# Robot Beginner Kit with Arduino – Mechanical Tutorial

Robots and robotics are one of the most interesting aspects of the use of Arduino, thanks to this inspector to realize your first robot is possible with a contained expense and a couple of hours to disposition.

Kit:

- Red plastic cover (x2)

- Motor supports (x2)

- Motors (x2)

- Wheels (x2)

- Indented plastic washers (x2)

- Infrared Proximity Sensor "Sharp GP2Y0A21YK" (x1)

- Motor Driver 1A Dual TB6612FNG (x1)

- Battey holder 4xAA with Jack Connector (x1)

- Ball Caster (x1)

- Jumper F/F (x10)

- Jumper F/M (x10)

- Cross screwdriver (x1)

- Pack of screws (x1)

- Pack of standoffs (x1)

- Handbook (x1)

1.	In the photo you can see two motors on which are positioned the two indented washers. The indented plastic whashers can be used to count motor's turns with an encoder.
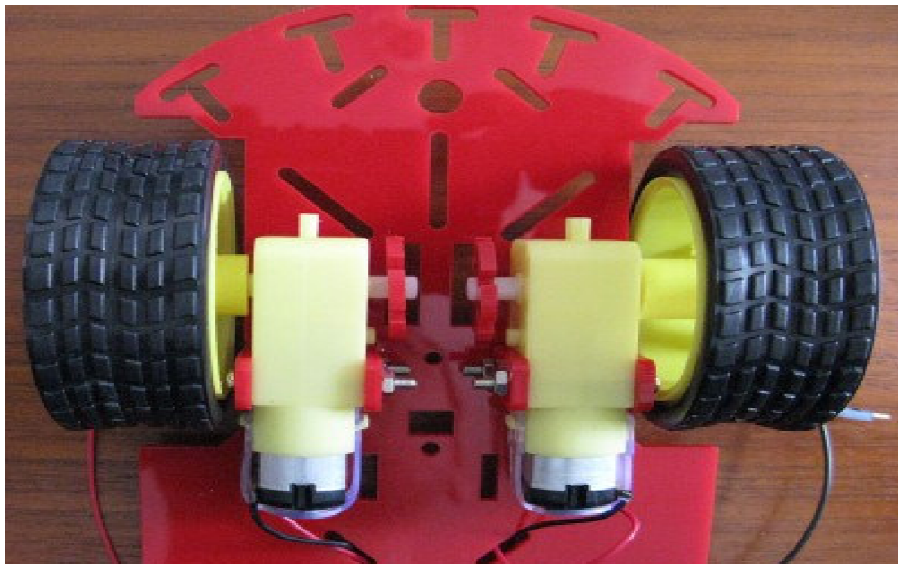

2.	Put two motor supports on the cover with less holes and insert the long screws on the others two.
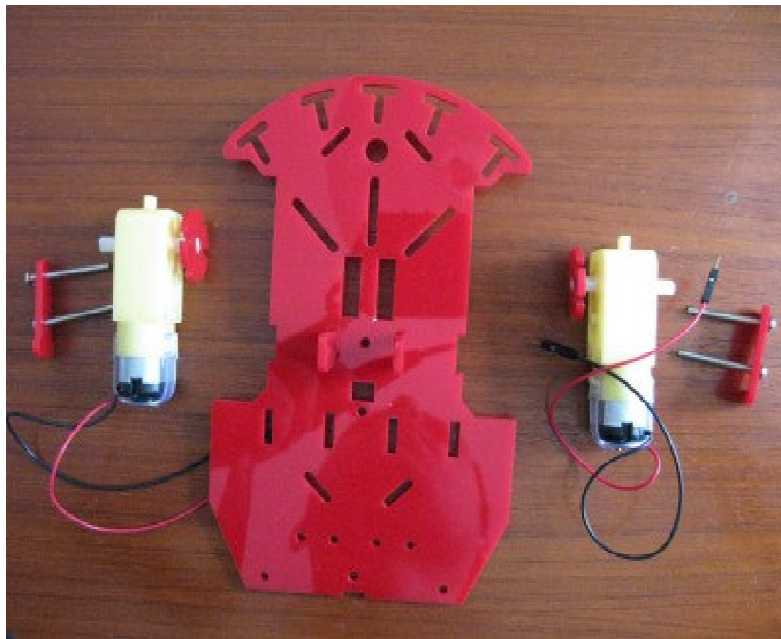
3. Pass the screws through motors' holes then fix it with two dice for each motor.
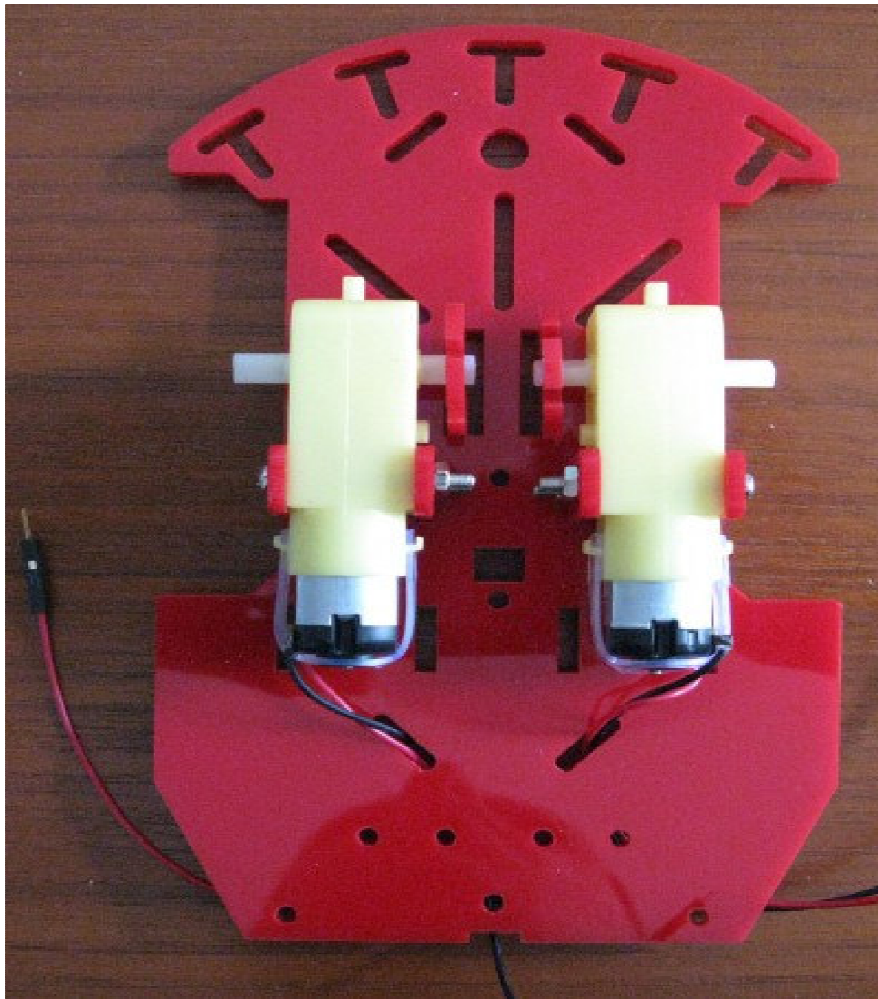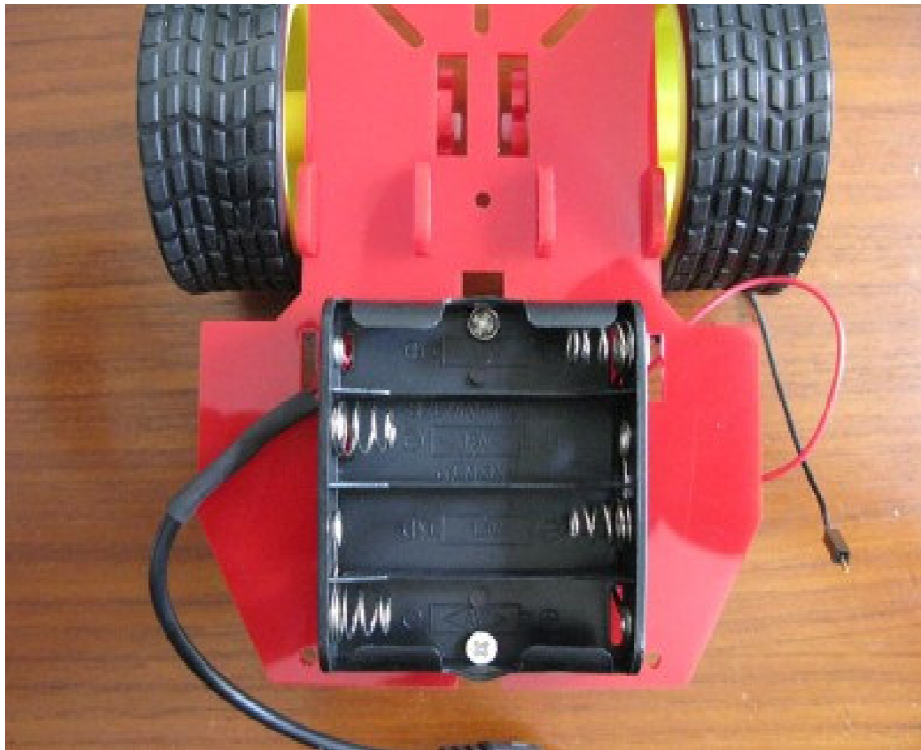

4. Insert the wheels on motors' drive axle.
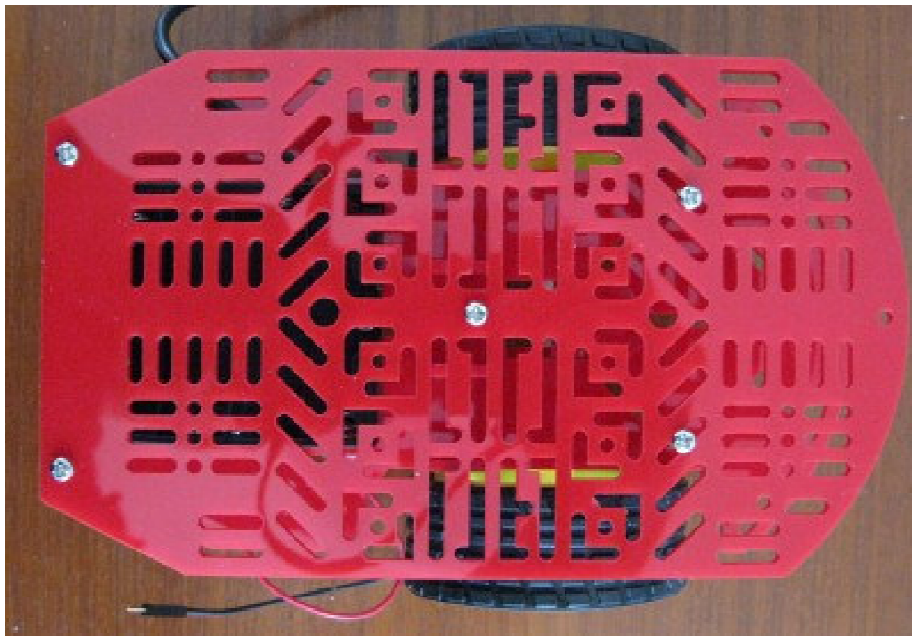
5.   Put the ball caster using two standoffs.

6.   Fix the battery holder on the chassis with two screws and we end the first part of our robot.
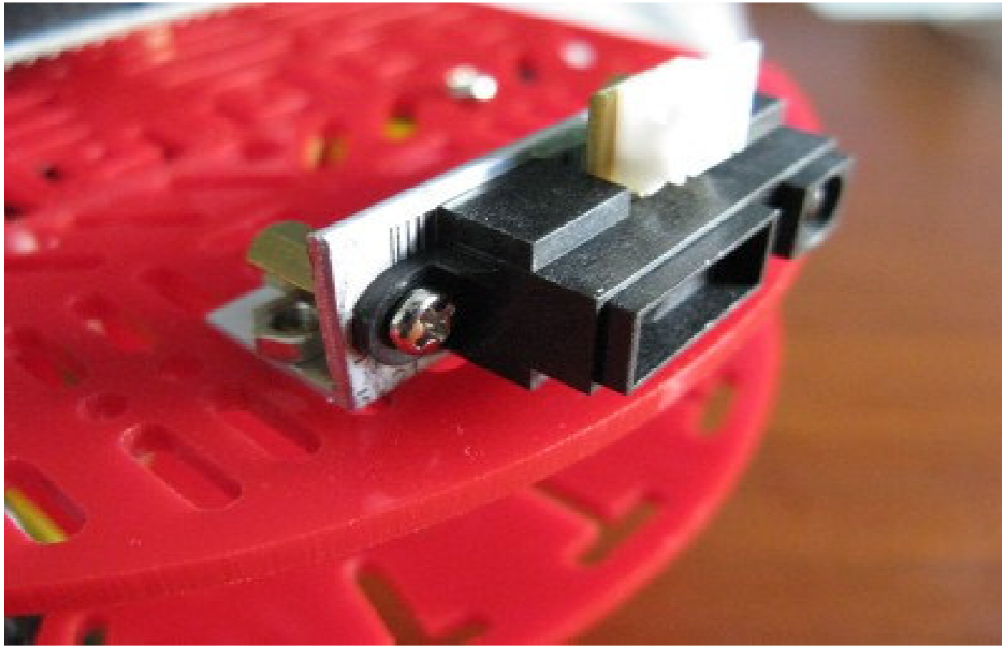
7.   Then put the standoffs on the chassis (the central one is an optional).

8.   Screw the superior chassis

9.   You can mount the sensor using a "L" aluminum bracket.

10.   Ends here the installation of the mechanical part. In the next tutorial you will assemble the electronics, and you will see a first sketch of sensor calibration.

Finally assembly: