

ELECTRIC SCOOTER



University of
Zagreb

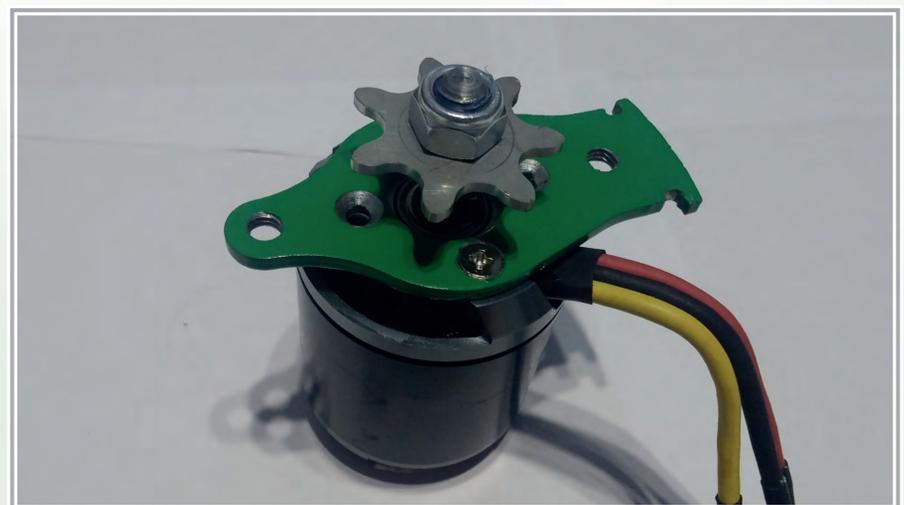


The ultimate goal of making an electric scooter was to make a safe and comfortable vehicle, with a maximum speed of at least 20 km/h and with range of about 15 kilometers. Also, a huge benefit of this electric scooter is the cost of energy that is used to drive the scooter which is very below average costs for any other vehicle (about 0.14\$ per 100 km).

From the beginning, the idea of making an electrically propelled vehicle seemed to be a very interesting project. The ultimate goal was to make a safe and comfortable vehicle, with a maximum speed of at least 20km/h and with range of 15 kilometers. The engine of the scooter weighs only 1.2 kg and the maximum power that it gives is 2000W, which is far above all Chinese electric-powered vehicles of this type.

Printed circuit boards were drawn on the computer and the entire system is controlled by a tiny microcontroller called the Atmega328. It is programmed in such a way that there are several menus that display different data and it is even possible to change the driving mode of electric scooter.

Scooter is also equipped with front and bottom lighting needed for night driving. Bottom light is made of RGB LEDs that can change its colour. This vehicle is drivable without registering if you drive exclusively in "economy" mode driving. Also, driving is easy and safe due to robust construction, shock absorbers, disc brakes and well programmed engine management system.



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