

The Tesla Scooter

**The first Macedonian
gasoline to electric
scooter conversion**

HISTORY

- Getting the idea**
- The yellow DC scooter (short story)**
- The AC scooter (Tesla Scooter)**

Getting the idea



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10km/h?!

The yellow DC scooter



The yellow DC scooter



The yellow DC scooter



The yellow DC scooter



The yellow DC scooter

- New 36 volt analog controller
- Two 200W 24V DC permanent magnet motors running at 36V with approximately 350W each (700W total)
- Six 12V 12Ah lead acid batteries (24Ah@36V)
- Distance 40km@30km/h (uphills climbing)
- Cost: 0,1 Euro/charge
Translated: 10 charges = 1 Euro = 400km!!!

The yellow DC scooter

- YouTube

Electric Scooter Bitola, Macedonia

- EV Album

Pimped Chinese kid's electric bike

The Tesla Scooter

- Two guys (27 and 32) with no solid incomes
- Workplace: an ordinary garage with no tools
- A heavy gasoline Chinese scooter
- No shop for proper electronics in the Balkans
- No proper MOSFETS (IRFP054 up to 60V)
- No proper motor (3KW Sever 220V AC)
- No proper batteries (lead acid for UPS)

The Tesla Scooter

- Removed from Chinese scooter: motor, crankshaft, carburetor, tank, filters, lamella...
- Soldering from scratch: 3 phase inverter with a frequency and PWM. Speed feedback sensor.
- Cheap 3 Euros microcontroller (PIC16F876)
- Ordered MOSFETS directly from IRF (IRF4115)
- Motor rewinding from 220V to 110V
- Still no proper batteries (lead acid for UPS)

The Tesla Scooter



The Tesla Scooter



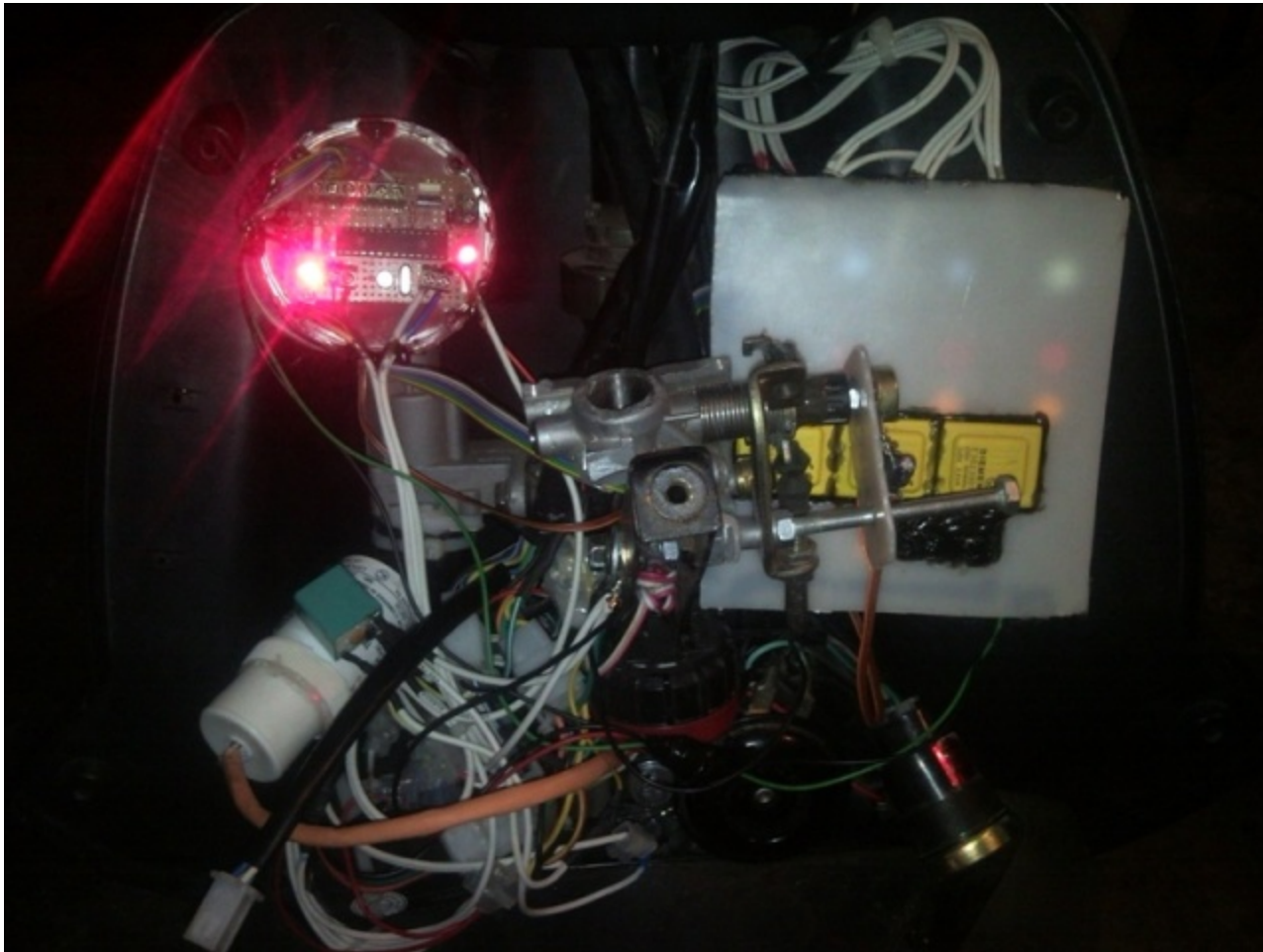
The Tesla Scooter



The Tesla Scooter



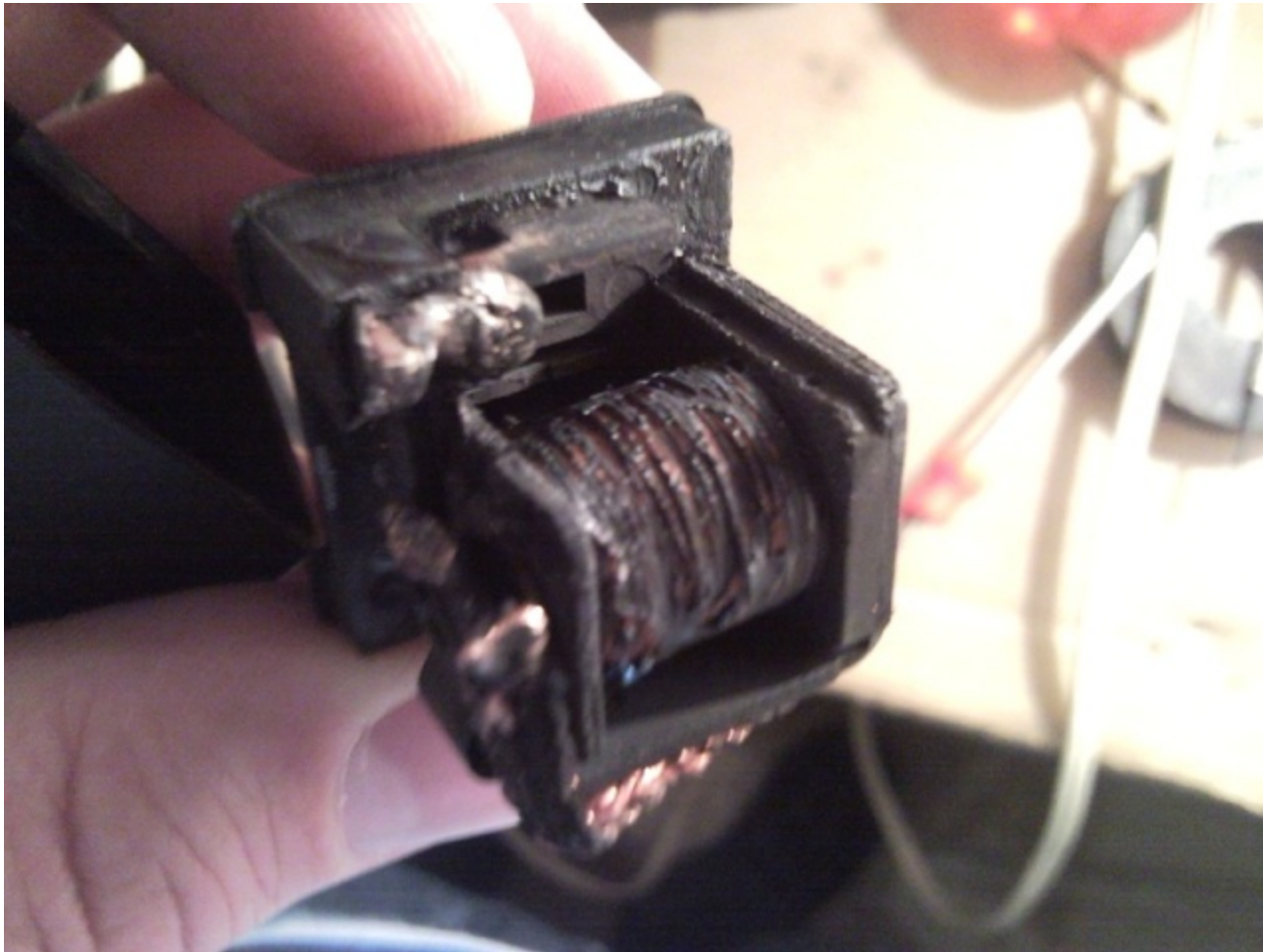
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The Tesla Scooter

- AC motor has no brushes, no magnets and the efficiency is still over 90%
- No need for a gearbox
- Full LED with no single bulb
- Made from scratch + Lithium = 200km/charge
- Lithium recharging 80% in 1 hour
- The cheapest and most effective transport

The Tesla Scooter

- YouTube

Tesla Scooter

- EV Album

2006 Baotian BT50T