

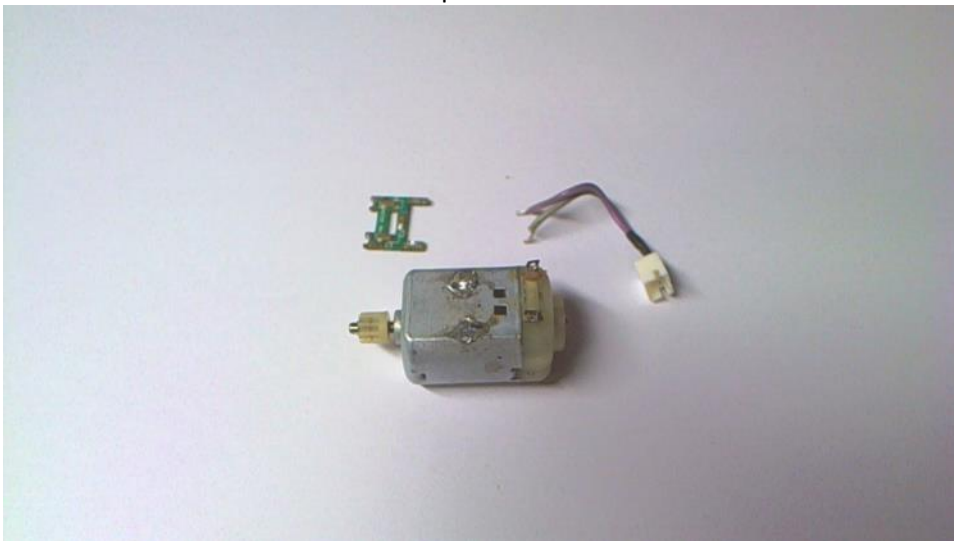
Motor winding

187 windings per armature

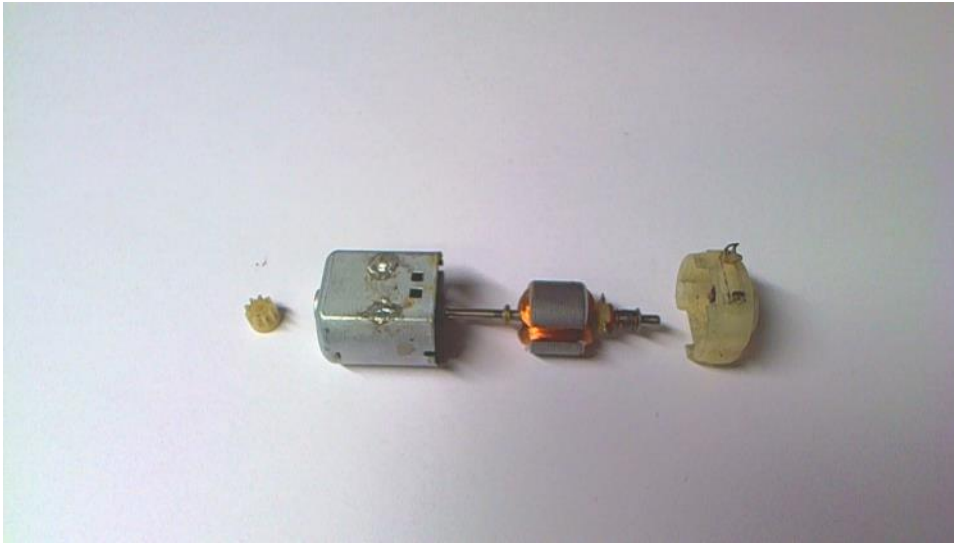
Carrera motos had burned out



Removed connector wires and small pcb



Unfold 2 tabs from plastic end and pull apart



Wiring at top of armature the left connector goes around each node clock wise and then end goes to next connector to the right.

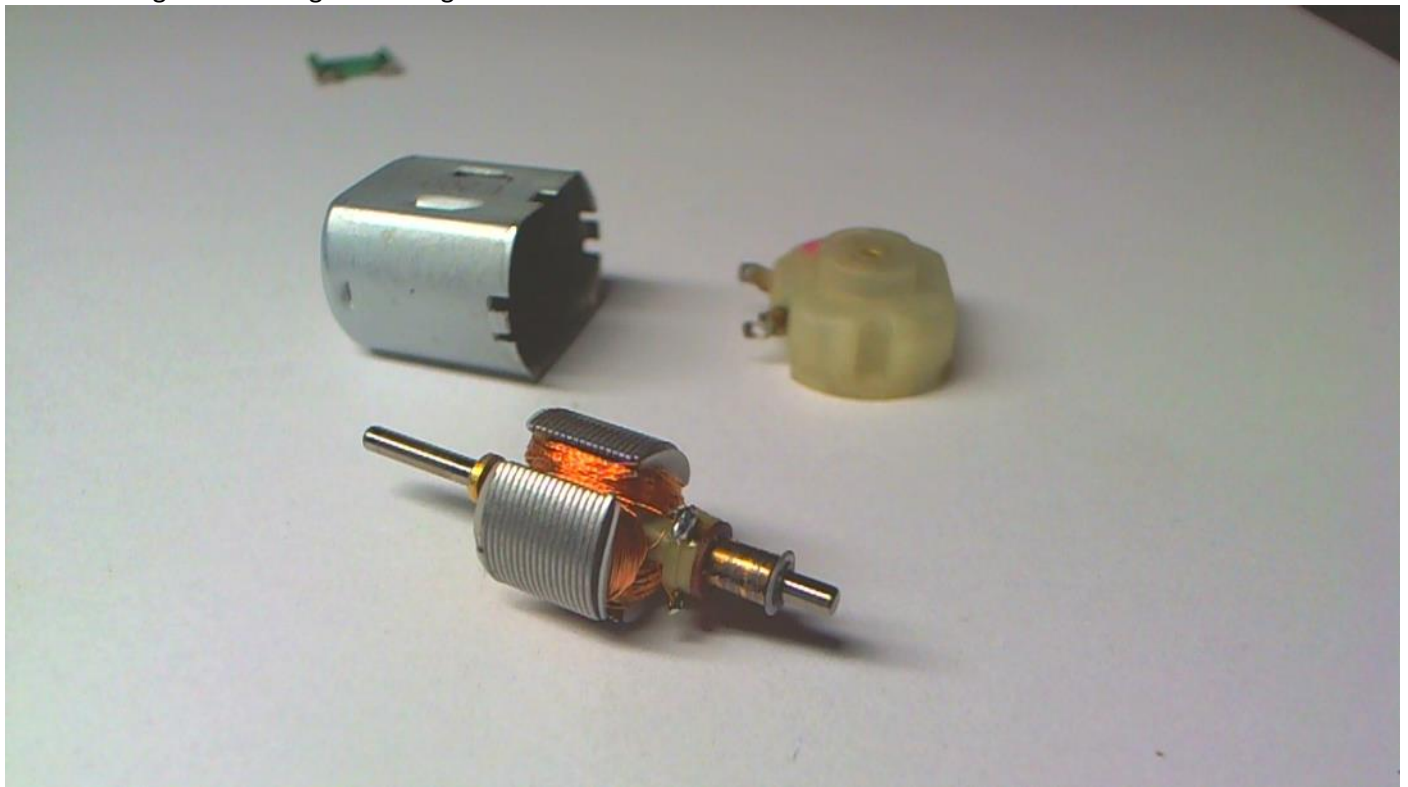


There are 187 turns each and wire is less than 0,1mm

Wire removed and parts cleaned

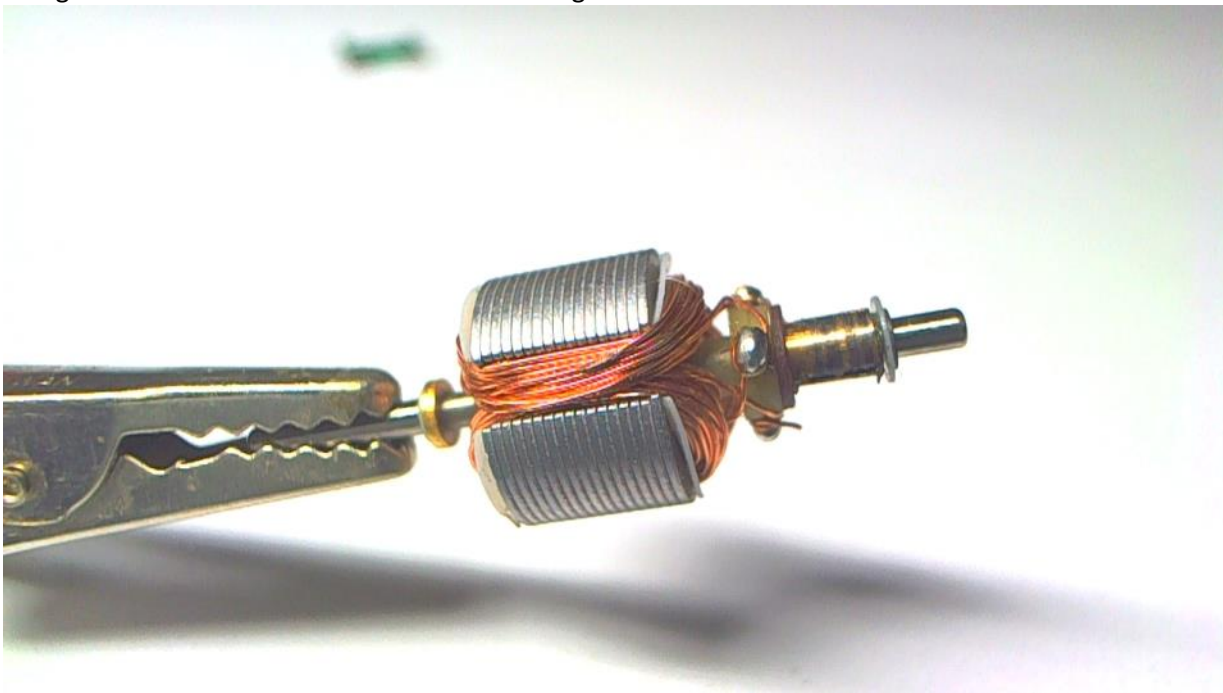


Rewinding for 150 turns each with 0.1mm wire. It runs, but very hot at 8v quickly. Caused by fewer turns or a slight mis-wiring on one lug?





Using 0.26mm wire for 45 turns motor is running.



Comparison

Carrera Mini WRC original motor
8v test for 50m 11.87s

Carrera Mini WRC rewind motor
8v test for 50m 7.56s
9v test for 50m 6.15s 1.2A
10v test for 50m 5.84s 1.6A- 2.1A