

Investigating the relationship between the electric current and magnetic force of a wire

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1 Introduction

As the world transitions from internal combustion engines to electric motors, I have begun to wonder how exactly electricity is used in vehicles. More specifically, how electrical energy is transformed into kinetic energy. Having worked with DC motors for small projects when I was younger, the most I understood was that, when electricity flowed through the DC motor, it would spin. Now, with a more comprehensive understanding of magnetism, I'm curious to know just how electricity is used to create force.

2 Background