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Design and Fabrication of Regenerative Braking System using Flywheel to Charge the Batteries in EV

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Abstract: This paper shows how to make and use a wheel that spins fast to save energy when the car stops and use it to fill up the power cells in cars that run on electricity. Regenerative braking is a new way of saving and changing the power of movement when the car slows down into electricity that can be used. The old way of making cars stop wastes energy as warmth, making them work badly and put more bad gas in the air. The new way of stopping the car uses an electric machine to make it go slower, making a force that slows down the wheels and changes the movement power into electricity power. The saved power can be used to run the car's electric things or kept in power cells for another time.

Keywords: regenerative braking, flywheel, electric vehicle, kinetic energy recovery system, sustainability, energy efficiency;

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