

Abstract Submitted
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Stationary-bike bike generator JORDON PENOR, Siena College —

The design of a stationary-bike bike generator and a system to store the energy generated is presented. Modifications to the stationary bike include a front wheel substitution, a mechanical assembly to accommodate a belt, pulley and motor, a rechargeable deep cycle battery, and a readout display of voltage, current, and guidance for the rider. The design uses a motor attached to the top of the system storing the energy to generate electric current. The system is designed to recharge batteries at the proper voltage and current to avoid damage. The system is intended as a prototype for a college class in Bolivia to develop a series of bike generators to provide power on days when their power is not reliable.

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