HARNESS ENERGY FROM CYCLE

INTRODUCTION

Throughout the world, the number of bicyclists are increasing rapidly as commuters seek a healthy, eco-friendly, and cost-effective mode of transportation. With cycling's increasing popularity there is a lot of green energy to be harvested.

As people in the world over continue to search for renewable energy sources,innovative and interesting ideas for generating power are constantly being devised. Those interested in using cycling as their means of fitness and producing energy can adapt this technique.

ADVANTAGES

This Mobile charger equipment consists of a (12V) DC generator motor which could produce (8V – 16V - based on the speed of the vehicle) and when the wheel rotates which is attached to it Direct current is produced. It may then be stored in a normal 2 (1800mAh) battery and it is normally used whenever required.

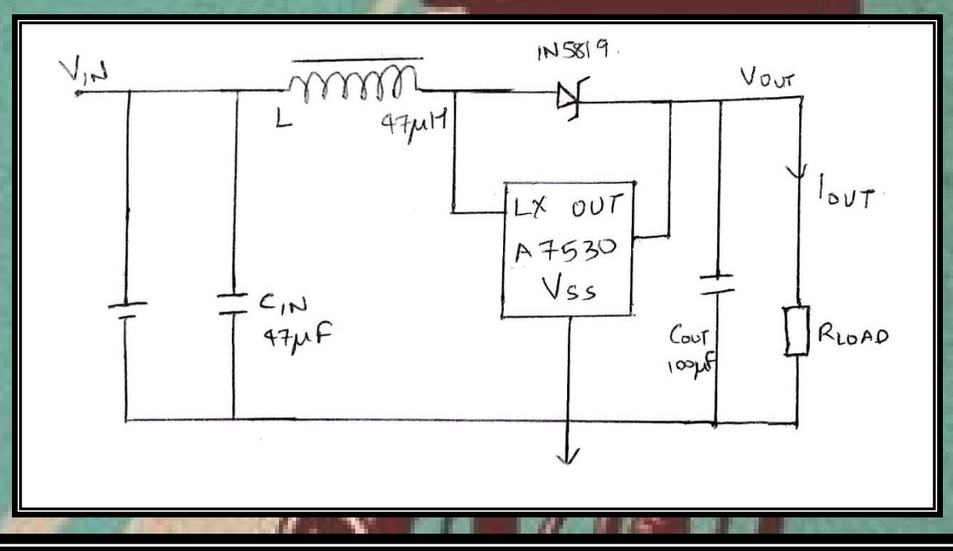
The storing of power is done in order to use the mobile charger even when `the cycle is not being used. Then it is given to a Multi-Pin Plug Mobile Charger Cord or may even be charged via USB cable.

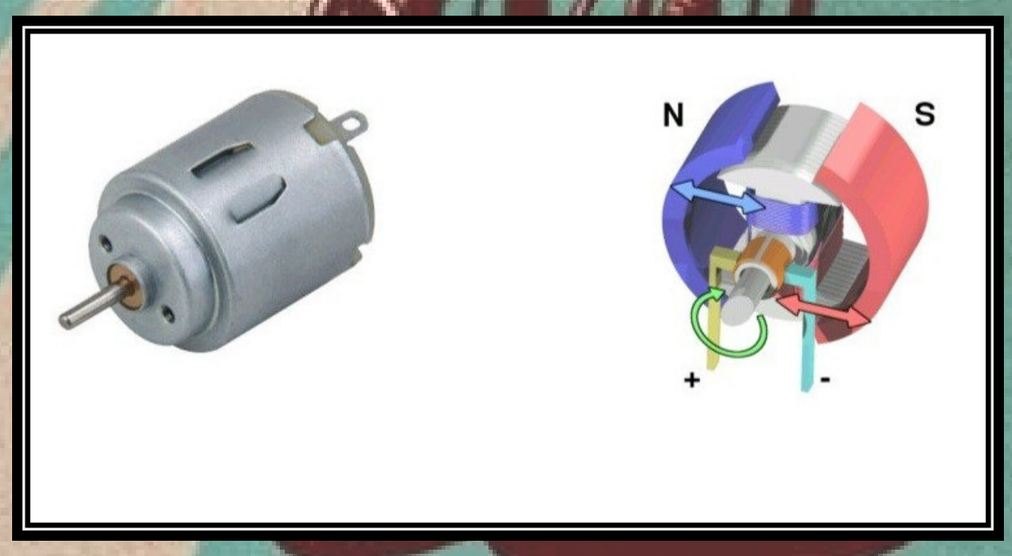
The main theme is to provide charge for the mobile under any emergency cases and it is done not by charging via the residential power line but through generating power from the DC motor during traveling, storing and using it. This could be greatly useful in the case of mobile charging in the car and bikes. Instead of charging the mobile from a cigarette pin we can use the energy produced while riding the cycle. Thus generating and storing DC which could be used for charging the mobile.

Hence it is time saving since the charging of the mobile could be done during the traveling itself.

WORKING PRINCIPLE

We have a motor attached with a fan when we place this outside (it consists of a small magnet so that while traveling it could be attached to the vehicles body) - in case of bus or train or It is fixed near the grill in case of car/bike. while traveling it gets rotated and it is capable of producing (9 to 12) Volts based on the speed of the vehicle, which is then fed into the voltage regulator IC 7805. When (9 to 12) V is passed through the IC 7805, we get a constant 5V as output which is more than enough to charge our Mobile Phone's, MP3 Players, etc.





APPLICATIONS

Bicycle pedaling converts the mechanical energy into electrical energy through manually labor. The word energy means required to do work. The world is filled with many kinds of energies and energy resources. Electricity is the main energy which is making the world run every day, without electricity we can't do any work and the world will struggle

A bicycle is a human-powered, pedal-driven, single-track vehicle having two wheels attached a frame, one behind the other. A sprocket or sprocket-wheel is a profiled wheel with teeth, cogs, or even sprockets that mesh with a chain, track or other perforated or indented material. An average adult rider could produce from 100 to 320 watts of power depending on their physical strength, stronger and fitter adults could create between 225 to 320 watts or more. The stand is best suited to bicycles in reasonable condition with 26 or 27 inch wheels, but can also work with wheels greater than 10 inches. How much pedaling will you need to do to charge average household appliances? If you pedal for two hours, then you should produce around 400 watt-hours of power. That's enough to power a 200-watt television for two hours, or a 100-watt light bulb for four hours. A 20-watt laptop PC could be charged for 20 hours and a 15-watt fluorescent bulb for almost 27 hours.