

A PROJECT REPORT ON
“PEDAL OPERATED POWER GENERATOR”

Carried out at

Siddaganga Institute of Technology, Tumkur.

Sponsored by KSCST, Govt of Karnataka, Bangalore.

**Report submitted for the fulfillment of the requirements for the
project work of VIII semester in**

B.E. Mechanical Engineering

Of

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,
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SYNOPSIS

Power is the back bone of the life on the earth. Without power we cannot imagine human life nowadays. The usage of power is required in various field like mechanical, chemical, medicine industries, and other engineering and domestic needs. But natural sources of power generation are depleting day-by-day. So lot of research is going on for alternative source of generating power to fulfil the present demand. There are many alternative ways of power generation. The day to day consumption of power is increasing. At this point even a small saving of power or generation of power by some alternate means helps the human kind a lot. Among many alternate ways of generation a small pedal operated power generator is a worth full thought

The aim of the present project is to utilize human energy during cycling exercise by peddling cycle to maintain his body fitness, to produce power. This power can be generated in rural and remote areas also, where power is unreliable. This Pedal Generator can be used as a backup.

The exercise machine has a pair of pedals and a wheel that is rotated when the pedals are rotated. The shaft of the cycle can be coupled to a generator in turn the generator generates electricity. The generator may be driven by a chain that is rotated by the pedals.

The generator is detachably coupled to the exercise machine. This permits use of the exercise device without producing electricity also.

Aim of the present investigation is also to provide a new pedal operated power generating system which is economical with regard to both materials and labour. As it is economical, It can be purchased by common man and can be utilized with proper advantage.

This power generated can be used to charge UPS, which in turn can be utilized to run a TV, Computer, Blender generate power while in remote areas, Emergency power (e.g.- Wheat Grinder, HAM radio), Educational tool for the classroom, Charge cell phone/ laptops, Charge lead acid AGM power pack/ batteries.

It is reliable where power fluctuations are more and where power lines couldn't reach.