

FABRICATION OF REGENERATIVE BRAKING SYSTEM

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A Project report submitted

In partial fulfillment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that project work is entitled **“FABRICATION OF REGENERATIVE BRAKING SYSTEM”** is a bonafide record done by **P.JAGADEESH(15811A03B0),M.JASWANTH(15811A0381),P.MURTHY BABU(15811A03A8),K.SIVA(15811A0372)** students of final year B.Tech in the Department of Mechanical Engineering, Avanti Institute of Engineering and Technology, Visakhapatnam. This work was done for the fulfillment of the requirements of the award of Bachelor of Technology during the 2015-2019.

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ABSTRACT

As the basic law of Physics says 'energy can neither be created nor be destroyed it can only be converted from one form to another'. During huge amount of energy is lost to atmosphere as heat. It will be good if we could store this energy somehow which is otherwise getting wasted out and reuse it next time we started to accelerate. Regenerative braking refers to a system in which the kinetic energy of the vehicle is stored temporarily, as an accumulative energy, during deceleration, and is reused as kinetic energy during acceleration or running. Regenerative braking is a small, yet very important, step towards our eventual independence from fossil fuels. These kinds of brakes allow batteries to be used for longer periods of time without the need to be plugged into an external charger. These types of brakes also extend the driving range of fully electric vehicles. Regenerative braking is a way to extend range of the electric vehicles. In many hybrid vehicles cases, this system is also applied to hybrid vehicles to improve fuel economy. A normal car is only about 20% efficient, meaning some 80% of the energy it expends is wasted as heat created by friction.