AUTOMATIC FUEL CONSERVATION SYSTEM FOR VEHICLES AT TRAFFIC SIGNALS

(Sponsored by K.S.C.S.T, BANGALORE)

A Project Report
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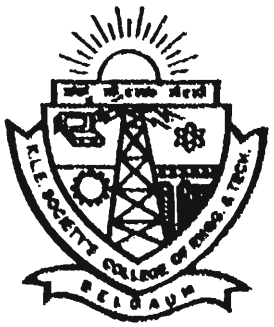

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1. INTRODUCTION

Urbanization and industrial development has increased the migration into the cities. Growing number of vehicles have posed the problems of road congestion and environment pollution in major cities.

Global warming, scarcity of fossil fuel is a major issue in the entire world. Various measures and research on alternative sources of energy are being carried out. Minimization of fossil fuel usage is at the top of the agenda.

In this project we have proposed an idea to conserve the unnecessary fuel burnt by vehicles waiting at the traffic signals. This project switches off the ignition of the vehicles waiting for GO signal, thereby reducing fuel consumption and reducing environment pollution hazards. So the project is very useful at all traffic signals in crowded regions.

This congestion at traffic signals has posed greater challenges for the emergency vehicles [such as ambulance, fire brigade services, VIP vehicles etc.] because these vehicles have to move towards destination very fast, but in present days there will be traffic jams or slow traffic flow at various points and its also difficult to manage ways for such vehicles in crowded traffic. This project presented here controls the traffic lights so that the traffic should not crash in case of emergency vehicles movement. Whenever such vehicle comes nearer to traffic signal, automatically all lanes will be blocked till the vehicle passes enough distance from the signal and then resume its normal working.

The gadget works according to the program, which is stored in microcontroller. By this method we can implement a good traffic light system which enables ignition control of vehicles, thus conserving reasonable amount of fuel burnt by vehicles waiting at the traffic signals and a smart traffic control when a emergency vehicle comes into its vicinity.