A Project Report on

Development of an Eco-Friendly Pneumatic Engine for Reduced Fuel Consumption

Submitted by

CH. SAI KAMESH **BL.EN.U4MEE10013**

M. I. NADEEM **BL.EN.U4MEE10035**

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Under the guidance of

Mr. Shashi Kumar M E
Assistant Professor
Department of Mechanical Engineering

AMRITA
VISHWA VIDYAPEETHAM
U N I V E R S I T Y
Established u/s - 3 of the UGC Act 1956
BENGALURU CAMPUS

AMRITA SCHOOL OF ENGINEERING, BENGALURU
AMRITA VISHWA VIDYAPEETHAM
BENGALURU- 560 035

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ABSTRACT

In the cities where the vehicle density is more, it is often seen that the vehicles are trapped in traffic signals especially at peak hours and hence the consumption of fuel in vehicles even at idling conditions becomes unavoidable. This leads to the necessity of finding a way to reduce the consumption of fuel at idling conditions as these are the non-renewable energy sources. The present work focuses on the conceptual design of a Hybrid Engine i.e., the combination of a Petrol Engine and Pneumatic Engine to reduce fuel consumption in vehicles, environmental pollution and thus save natural resources. Petrol Engine runs when high torque or high speed is required and on the other hand Pneumatic Engine is designed to run when high torque and high speed are not required, say at traffic signals (at slower speeds. Sensors are used to gauge the speed and torque required by the engine, and accordingly the control gets shifted from Petrol to Pneumatic Engine or vice versa. It can therefore be concluded that the Hybrid engine thus developed can be one of the efficient solutions for the fuel crisis.

Keywords: *Pneumatic Engine, Hybrid Engine*