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B.V. Bhoomaraddi College of Engineering & Technology.

AUTOMOBILE ENGINEERING DEPARTMENT

Final Year Project Report on

"Hybrid Pneumatic Vehicle"

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Abstract

This project deals with the design and fabrication of a series hybrid 2- wheeler that is propelled by compressed air. In this a S.I. engine (100 cc, 2stroke) drives a compressor and the so produced compressed air is utilized to propel the vehicle using vane motor. This compressed air is initially made to accumulate in a pressure tank from where it flows through vane motor. The flow rate through vane motor is varied using a 3/2 foot valve and this variation in flow rate accounts for change in vehicle speed i.e. its acceleration or deceleration. The outcome of project is a series hybrid 2 wheeler prototype which has minimum requirement of 30 bars pressure to be developed and has Payload capacity of 75 kg.

Keywords: Pneumatics, Hybrid, I.C. Engine.