

THE PERFORMANCE OF NATURALLY ASPIRATED ENGINE WITH IMPOSED FUEL LINE MAGNET

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"I declare that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. This thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree"

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ABSTRACT

This project is about Fuel Line Magnet (FLM) device where positioned in the intake fuel line for the fuel injection system. The main objective of this project is to study the performance of an internal combustion engine and overcome the problems of the existing devices. It's also to measure and compare the performance of the (power, torque and air fuel ratio) of CAMPRO engine before and after using fuel line magnet. The FLM used powerful magnetic material to produce powerful, focused, sharply reversing magnetic fields. This special magnetic resonance produces a significant impact fuel passing through the magnetic field of the device. The study used Dynapack Chassis Dynamometer machine to identify the Power, Torque and Air Fuel Ratio (AFR). The results such as graph and data are automatically plotted after finish the experiments. The result was comparing the performance of the engine before and after using fuel line magnet. This paper actually tries to explain the effect of Fuel Line Magnet by three arrangement of FLM has been test on wheel chassis dynamometer in order to observe the effect of engine. From these three data, comparison is made with normal intake set up in order to verify either this method is help to increase the engine performance as well or not. The best performance of CAMPRO engine by using the fuel line magnet is depending on its arrangement at the intake fuel line.

Keywords: Power, torque, air fuel ratio, chassis dynamometer, CAMPRO engine, naturally aspirated engine, fuel line, magnetic field.

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