Analisa Variasi Penggunaan Dua Bahan Bakar Pertamax Dan LPG Terhadap Emisi Gas Buang Motor Injeksi Dengan Memvariasikan Sudut Pengapian

(Analysis of Variations in the Use of Two Pertamax and LPG Fuels on Injection Motor Exhaust Emissions by Varying the Angle of Ignition) Pembimbing (Ahmad Robiul Awal Udin, ST, MT)

Rusfian Maliku
Study Program of Automotive Engineering
Majoring of Engineering
Program Studi Mesin Otomotif
Jurusan Teknik

ABSTRACT

The increase in the need for fuel oil is someting that cannot be avoided and will continue to occur due to the increasing population and increasung number of vehicles, while the supply of fuel oil is increasingly depleting. LPG is an alternative fuel that can be used to reduce the use of fuel oil in vehicles. The purpose of this research is to analyze exhaust emissions produced by Pertamax and LPG fuels by varying the ignition angle of the injection motorcycle engine. The object of this research is the exhaust emission that is released in certain engine speed. The result of this research is that the installation of converter kits must be adjusted to the gas pressure required to start the engine. The results of the exhaust emission test resulted in an O_2 contect equal to 42% vol, the CO gas content produced by LPG was better than Pertamax, namely 46%, the CO_2 gas content produced by LPG fuel increased 24% from Pertamax fuel, HC gas content LPG fuel produced is higher than Pertamax fuel namely 83%.

Keyword: *LPG, Pertamax, Exhaust gas emissions*