

**ANALISIS PENGARUH VARIASI MATERIAL SPARK
PLUG DAN VOLTAGE STABILIZER TERHADAP KONSUMSI BAHAN
BAKAR PADA SEPEDA MOTOR TYPE CONTINUOUS VARIABLE
TRANSMISSION**

Oleh

I Ketut Andika Wiguna, Nim : 1815071017

Program Studi Pendidikan Teknik Mein

ABSTRAK

Penelitian ini bertujuan untuk dapat mengetahui pengaruh variasi kapasitansi *voltage stabilizer* terhadap konsumsi bahan bakar pada sepeda motor *type continous variable transmission* serta dapat mengetahui pengaruh variasi penggunaan *spark plug* terhadap konsumsi bahan bakar pada sepeda motor *type continous variable transmission*. Penelitian ini menggunakan metode eksperimen, yaitu dengan membandingkan hasil pengujian konsumsi kendaraan saat tidak menggunakan *voltage stabilizer* dan saat menggunakan *voltage stabilizer*, busi Iridium, busi Platinum. Objek penelitian yang digunakan adalah sepeda motor Honda ADV 150CC. Pengujian dilakukan pada putaran mesin 2000, 3000, 4000, 5000, 6000, 7000, 8000 RPM, pengambilan data setiap perlakuan masing-masing dilakukan sebanyak 10 x, Teknik analisis data menggunakan statistik deskriptif. Hasil dari penelitian ini diperoleh penurunan konsumsi bahan bakar terendah dicapai pada putaran mesin 2000 rpm pada *Voltage Stabilizer* 19800 μ f 35 volt, *Spark Plug* Platinum CPR9EAGP-9 dan tertinggi dicapai pada 8000 rpm pada *Voltage Stabilizer* 23500 μ f 35 volt, *Spark Plug* iridium CPR9EAIX-9.

Kata Kunci : Konsumsi, Penstabil Tegangan, Variasi Busi

Analysis of Fuel Consumption Using Spark Plug and Voltage Stabilizer on Continuously Variable transmission Type Motorcycles

By

I Ketut Andika Wiguna, Nim : 1815071017

Mechanical Engineering Education Study Program

Abstract

This study aims to determine the effect of variations in voltage stabilizer capacitance on fuel consumption on a continuous variable transmission type motorcycle and to determine the effect of variations in the use of spark plugs on fuel consumption on a continuous variable transmission type motorcycle. This study uses an experimental method, namely by comparing the results of testing vehicle consumption when not using a voltage stabilizer and when using a voltage stabilizer, Iridium spark plugs, Platinum spark plugs. The object of this research is a Honda ADV 150CC motorcycle. The test was carried out at engine speed of 2000, 3000, 4000, 5000, 6000, 7000, 8000 RPM, data collection for each treatment was carried out 10 times. The data analysis technique used descriptive statistics. The results of this study showed that the lowest reduction in fuel consumption was achieved at 2000 rpm engine speed at Voltage Stabilizer 19800 μ f 35 volts, Spark Plug Platinum CPR9EAGP-9 and the highest was achieved at 8000 rpm at Voltage Stabilizer 23500 μ f 35 volts, Spark Plug iridium CPR9EAIX-9.

Keywords: Consumption, Voltage Stabilizer, Spark Plug Variation