

Analisis Pengaruh Variasi Main Jet Terhadap Konsumsi Bahan Bakar dan Emisi Gas Buang pada Motor Bensin 4 Tak dengan Penggunaan Variasi Jenis Busi. (*Analysis of the Effect of Main Jet Variations on Fuel Consumption and Exhaust Gas in 4-stroke Gasoline Motors with the Use of Variations in Spark Plug Types*). Ahmad Robiul Awal Udin ST. MT (*a Chief Counsoler*) and Aditya Wahyu Pratama,ST,MT (*as a member counselor*)

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ABSTRACT

A motorcycle with a carburetor system can actually be made more fuel efficient than the standard, by changing the intake of fuel consumption is like changing the part of the carburetor itself. Namely by modifying the inside of the carburetor like the mainjet with a size smaller than the original. Of course, by changing the intake of fuel consumption, engine performance is not perfect because the ratio of air and fuel (AFR) on a gasoline motor typically is 1: 14.5, while the results of this study indicate fuel consumption with standard mainjet and the use of racing spark plugs have the level of fuel consumption is lower at 2500 RPM which is 9.2 ml / sec with CO emission rate of 2.61%, CO₂ of 1.9%, HC of 370ppm, and O₂ of 15.8%. And the consumption of 115mm size mainjet with the use of racing spark plugs has a higher fuel consumption rate of 2500 RPM at 14.6 ml / sec with CO exhaust emission rates of 1.26%, CO₂ at 2.2%, HC at 65ppm , and O₂ which is 16.7%.