Pengaruh Variasi Lubang Venturi Terhadap Konsumsi Bahan Bakar dan Emisi Gas Buang Yamaha Vega R 110 CC. (The Effect Of Variations In Venturi Pits On Fuel Consumption And Exhaust Gas Yamaha Vega R 110 CC) Ahmad Robiulawaludin (a Chief Counsoler) dan Adityo (as a member counselor)

Oki Dian Fajar

Study Program of Automotive Machine

Majoring of Engineering

Program Studi Mesin Otomotif

Jurusan Teknik

## **ABSTRACK**

The use of diameter variations in venturi holes carburetor gasoline motors aims to improve the process of entry of air that will enter the carburetor. The process of entry of air into the carburetor can affect the mixing process between fuel and air, this is because if the air that enters the carburetor is blocked the air pressure becomes reduced so that the fuel will remain a liquid fluid and not become a mixture of fuel and air mist. In this study, researchers examined how much influence the diameter of the carburetor venturi ventilation diameter on fuel consumption and exhaust gas produced by gasoline motors. The results of this study indicate the lowest fuel consumption on the use of a 20 mm modified carburetor at 1000 RPM engine speed of 0.0724 kg / hour. And the exhaust gas test shows the lowest CO content in the use of a 20 mm modified carburetor at 1000 RPM engine speed of 1.87% and the lowest HC results in the use of a 20 mm modified carburetor at 1000 RPM engine speed of 245 ppm, at CO2 shows the highest results at 20 mm modified carburetor at 1000 RPM engine speed of 3.83% and the highest O2 content on the use of 20 mm modified carburetor at 1000 RPM engine speed of 14.07%.