Pengaruh Variasi Remap ECU Juken 5 dan Penmbahan Bioaditif Minyak Kayu Putih 4% Pada Kendaraan Vixion Terhadap Performa dan Emisi Gas Buang (*Effect of Juken 5 ECU Remap Variation and 4% Eucalyptus Oil Bioaditive Addition on Vixion Vehicles on Performance and Exhaust Emissions***)**

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ABSTRACT

Motor vehicle technology is developing rapidly in order to improve vehicle performance and minimize emissions produced. One of technologies applied to motorcycles is injection technology. Control in injection system is the ECU or engine control unit that regulates the entire injection system, but the standard ECU has the disadvantage of the lack of a wide adjustment curve making it difficult to adjust so that it requires a stand alone ECU, the Juken ECU. So that more extensive adjustments can be made to improve vehicle performance. And in this study additives were also added with the hope of being able to reduce exhaust emissions one of the additives is eucalyptus oil bioadditive. The data obtained from the results of the study show that the highest torque is in the variation of the ECU Juken 5 standard mapping with the addition of eucalyptus oil 4% bioenergy which is 8.31 Nm with a power of 7.5 Kw while the best emission is at the standard ECU with the addition of eucalyptus oil bioaditive 4%, namely O2 of 11.70% Vol, CO of 2.28% Vol, HC of 257.10 Ppm and Lamda of 1.91.

Keyword : ECU, bioadditive, Performance, emission