EXPERIMENTAL STUDY ON PERFORMANCE CHARACTERISTIC OF ELECTRONIC CONTROL UNIT (ECU) MEGASQUIRT III AS A REFERENCE FOR MOTOR CYCLE GAS INJECTION ECU

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Abstract
The development of automotive technology increasingly experiencing growth both in terms of the use of alternative fuels such as BBG and control fuel consumption. ECU is an electronic device that is used on automotive injection system like a motorcycle or car as a regulator of fuel consumption and ignition timing when burning.

MS3 (Mega Squirt III) MS3 (Mega Squirt III) is one of the types of injection ECU which are commonly used in sports cars. To make it takes several aspects experimental studies, including: the test input signal on board connector, test the wave signal input and output on the wiring connector with an oscilloscope and a function generator, testing the effectiveness of the MAP (Manifold Air Pressure) sensor, and simulations effectiveness ECU with potentiometer and injectors.

Based on experimental studies that have been done, MS3 ECU not only can be used on cars, but can be used on a motorcycle because the Boolean logic used is “OR”. In addition, note also that the Multitester outputan fuel injection produced by the MS3 ECU has a capacity of maximum voltage of 11.46 V input voltage from the power supply 12V.

Keywords: MS3 ECU, Function Generator, MAP sensor, a Multitester, Oscilloscope, Potentiometer
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