DESIGN AND BUILD ACCU MONITORING SYSTEM ON MOTOR VEHICLES

Ardiyatama Kuncoro Mukti

Program Studi Teknik Elektro, Fakultas Sains & Teknologi Universitas Teknologi Yogyakarta Jl. Ringroad Utara Jombor Sleman Yogyakarta E-mail: muktiardiyatamakuncoro@gmail.com

ABSTRACT

The design of the tool is made to help the author as a 2015 Verza motorcycle rider who does not yet have the feature to see the condition of the motorcycle battery. This tool has a function to monitor the battery on a 2015 Verza motorcycle with a variable display in the form of temperature, voltage, and current. This system uses Arduino ATMEGA as a microcontroller. The microcontroller acts as the brain of the tool that is made, while the relay functions as a breaker for the battery charging voltage from Kiprok, this breaker aims to prevent the battery from being too overloaded from the charging standard of 14.8 V. The setpoint used to disconnect the charging voltage is 14 V and the voltage setpoint the minimum for the relay to work again is <14 V. this is intended for fast charging to occur again so that the battery voltage remains stable. The temperature display aims to let the rider know what the temperature of the battery is, the maximum temperature of the battery on a motorcycle is around 30c Celsius. The minimum battery voltage on a motorcycle is 12.1 V.

Keywords: Accu, Voltage, Charging