

Tachometer Based Mikrokontroller Atmega16 With Electromagnetic Induction Method On Spark Plug Wires As Ancillary Equipment Service Light On Motorcycle

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ABSTRACT

The final project was created with the aim of building the hardware, software, and know the performance of the Tachometer Based Mikrokontroller Atmega16 By Electromagnetic induction Method In spark plug Wires As Ancillary Service Light Fixtures on the motorcycle as a tool that can measure the rotation of the engine shaft perminuits.

Methods used in constructing mikrokontroller based atmega16 Tachometer with electromagnetic induction method in spark plug wires as ancillary service light fixtures on the motorcycle is made up of: 1) the identification of needs, (2) analysis of needs, (3) Design Method, (4) and (5) Test. This tool works is controlled by a system of mikrokontroller ATmega16 and programmed using software CodeVision AVR based language c. supporting Hardware consists of a power supply circuit based on Regulator 78xx ICS, using seven segment display 2.3 inches, BC547 transistor-IC ULN2803 BC557 as well as a series of drivers, FCS9013 transistor that is used to capture induction and processor as ATmega16 mikrokontroller.

After testing, be aware that Hardware can be run well by using the minimum system mikrokontroller ATmega16 combined with other support instruments. While the software is created using software CodeVision AVR also runs very well. However performance Tachometer Based Mikrokontroller Atmega16 By Electromagnetic induction Method In spark plug Wires As Ancillary Equipment Service Light On Motorcycles in general are still not running at maximum because fault reading on high RPM still with an average error of reach 8.24%.

Keywords: Tachometer, electromagnetic induction, spark plug Wires, ATMega16