

TEST EQUIPMENT PERFORMANCE CDI AND COIL MOTORCYCLE

By :
Samsul Huda
NIM. 08509134032



ABSTRACT

The objective of this final project is to design, build, and test the performance of test equipment CDI and coil performance in detecting the performance of various conditions of CDI and coil. This test tool is an extension of the limitations of CDI Tester by students.

Performance test tool is made through several stages including planning, manufacturing, and testing. The planning stages include planning box, the source voltage, the system triggers the CDI work and job rotation indicator, pressurized air system planning, design implementation time and cost required. The process of making the voltage source utilizing two step-down transformer that produces an AC voltage of 110 Volt and 12 Volt DC. Making the system work trigger CDI produces 7600 RPM maximum spin and pulser output voltage 0.5 Volt AC. Preparation of compressed air system capable of providing pressure on the spark plugs in a pressure chamber at 4 kg/cm².

Test equipment capable of testing the new CDI and coil for 3 minutes without any damage to the appliance. Performance test tool able to generate stable rotation at 2000-7600 RPM. Tests on AC C100 CDI 9 units at 7600 RPM obtained results, CDI spark new condition color blue and has the ability to spark a maximum of 5.5 mm. CDI is used to produce a blue color with a length of 5 mm. The CDI works with students to produce a blue color length of 3 mm. Former CDI CDI of 5 pieces and other works of students who can not produce sparks, although the distance was reduced to 0.3 mm wire so it can be concluded CDI is not working (dead). DC CDI Testing 8 pieces obtained results, new CDI color blue spark with a length of 6.5 mm. CDI unused color blue sparks and 6 mm. CDI former one is able to produce a blue spark and spark length 4 mm, the five other former CDI can not produce sparks and concluded death. On examination 7 pieces coil, new coil produces 6 mm long and blue. Coil used to produce the color blue sparks and splashes of 5 mm in length. Coil former as much as 4 units can not generate sparks on the wire Conductor. Based on the results of testing data, performance test tools can be used to detect the working condition of CDI and coil motorcycle in various conditions.