

***IMPROVEMENT OF 110 CC MOTOR PERFORMANCE AND FUEL
CONSUMPTION BY USING COIL RACING***

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ABSTRACT

This study aims to determine the increase in motor engine performance and fuel consumption with the use of a racing coil. Tester engine performance and fuel consumption at the CMT workshop, Gondanglegi Kulon, Kec. Gondanglegi, Malang, East Java. Vehicle performance testing was carried out with the SD 325 chassis dynamometer type dynotest. From the tested fuel consumption, namely at 1500, 2000, 3000, 4000 and 5000 rpm. The highest power obtained on the standard coil is obtained at a fuel pressure of 8.6 Hp at 4000 rpm, while for the racing coil the highest power is obtained at a fuel pressure of 8.9 Hp at 3000 rpm, and the highest torque on the standard coil is obtained at a fuel pressure of 24.41 N.m at 2000 rpm, while for the racing coil the highest torque is obtained at a fuel pressure of 25.61 N.m at 2000 rpm. The lowest SFC is obtained on the standard coil, where the value is 0.0099 Kg / Hp. Hour at 1500 rpm, while the lowest value of fuel consumption on the racing coil is 0.014 Kg / Hp.hour at 1500 rpm. The increase in power is due to the volume of fuel released.

Keywords: *racing coil, injection, vehicle performance, dynotest*