EXPERIMENTAL STUDY OF THE EFFECT OF CUTTING CHANGE IN 1 MM AND CDI RACING CYLINDER BLOCK USING PERTAMAX TURBO 98 FUEL ON HONDA TIGER 200 CC

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ABSTRAK

At this time, technology has begun to advance rapidly in terms of racing motorbike racing, many of them have modified certain components, one of them. Cutting on the cylinder block is the modification work of the researcher in increasing the capacity of the volume of fuel entering the cylinder, so that the performance or power output increases. of course the modification of changes also follows the rules of the research objectives, it should be adjusted to the functions, character of the Machine and other supporting components.

This research was conducted to find the performance of the 4-step engine including power, torque and fuel consumption. The testing method was carried out from 4000 rpm to stable at 4000 rpm then the throttle was rotated spontaneously reaching 10250 rpm engine speed, cutting 1 mm cylinder block and racing CDI using pertamax turbo fuel and premium generating a maximum power of 18,1 kW which achieved at 7573 rpm engine speed or smaller than the standard maximum power (before cutting the cylinder block and racing CDI) which is 17,1 kW which reaches 8122 rpm.

From the results of engine performance testing it can be concluded that the greatest power obtained by using the highest power standard is 17,1 kW at 8122 engine speed rpm, namely the use of premium fuel. The highest torque for cutting cylinder block and 18,1 N.m racing CDI at 7573 rpm rotation is the use of pertamax turbo fuel and also followed by replacing other components which are more supportive.

Keywords: Performance, Effect of Cylinder Cutting, 4-step Motor, CDI Racing i-max