

ABSTRAK

ANALYSIS OF THE EFFECT OF CHANGING THE CAMSHAFT PROFILE BY USING THE BRT CDI ON PERFORMANCE ON THE SUZUKI SATRIA F 150 CC ENGINE

Along increase rapidly vehicle motorcycle, this is of course very impactful which is so positive at world automotive however now this circles society especially among child young less satisfied with ability motorcycle standard manufacture then that many circles child young modify the motorbike for improve ability work engine motorcycle. Not free from world automotive mechanics very much have role important in development especially in world engine, then from that mechanics race in to design reset component-component that related with show off work engine. Wrong the other that is with modify *camshaft* and that more easy that is with way replace CDI racing. Aim from research this is for knowing comparison influence use *camshaft* standard with *camshaft* That already in modification with use CDI standard and CDI BRT, to show off work motorbike gasoline four steps.

In testing this use object bike motorcycle Suzuki Knight F 150 cc year 2012. Testing show off work bike motorcycle do with use Dynotest series v3.3 testing do in a manner alternate for *camshaft* and CDI standard and *camshaft* modification with use CDI BRT to obtain comparison torque, power, and consumption ingredients burn on motorcycle with speed 60 km/jam-80 km/jam.

Results research showing that use on *camshaft* standard use CDI standard only able to produce power maximum as big as 14,8 HP on round engine 9205, and produce torque as big as 7981 rpm with consumption ingredients burn 121 ml and 178 ml on speed constant 60 km/jam and 80 km/jam with distance go on 5 km. *Camshaft* modification use CDI BRT produce show off work that more well, thad is power and torque that more big and more big and more economical consumption ingredients burn on speed engine 60 km and 80 km. meanwhile on *camshaft* modification with use CDI BRT obtained power maximum as big as 18,4 HP on round engine 11,100 rpm and torque maximum obtained as big as 13,57 Nm on round engine 8,730 rpm with consumption ingredients burn 105 ml and 146 ml on speed constant 60 km/jam and 80 km/jam with distance go on 5 km.

Keywords : Standard, Modification, Camshaft, CDI, Performance, Gasoline motorcycle.