ANALISIS PENGGUNAAN CDI STANDAR DAN CDI *RACING* JUKEN 5 MENGGUNAKAN BAHAN BAKAR *PREMIUM* PADA MOTOR YAMAHA MIO M3 125 CC

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Innovation in the automotive sector in Indonesia is growing very rapidly, according to the needs of people who need transportation to meet their daily driving needs. Along with this, the automotive industry, especially the production of two-wheeled vehicles, is competing to create innovations such as creating motorcycle variants that have high performance.

Data were taken experimentally to determine whether there was a result of the treatment carried out on the object of research, namely the use of standard CDI and CDI racing juken 5 (without adjustment), which was carried out by opening the throttle constant 30 ° at variations in braking load of 1 kg, 2 kg, and 3 kg. on Yamaha mio m3 125cc.

The results showed that the effective shaft power (Ne) produced by the use of standard CDI was greater than the use of CDI racing juken 5 (without settings). Where the highest effective shaft power is obtained at 3 kg braking load, which is 0.488 kW for standard CDI use and 0.469 kW for racing juken 5 CDI (without settings). The use of effective specific fuel (SFCe) produced by the use of the CDI racing juken 5 (without settings) is more than the use of a standard CDI. with the highest effective specific fuel consumption of 1.662% for the use of CDI racing juken 5 (without settings), and 1.495% for the use of standard CDI at a braking load of 1 kg. So the thermal efficiency (ηth) produced by the use of the manufacturer's standard racing juken 5 CDI (without settings) is better than the use of the standard CDI.

Keywords*: standard CDI, CDI racing juken 5, combustion engine performance.*