

**KAJIAN EKSPERIMENTAL TENTANG PENGARUH PENGGUNAAN
VARIASI 2 JENIS CDI RACING TERHADAP KINERJA MOTOR DAN
KONSUMSI BAHAN BAKAR MOTOR BENSIN 4 LANGKAH 125 CC
BERBAHAN BAKAR PERTAMAX PLUS**

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INTISARI

Di Indonesia perkembangan dunia transportasi sangat pesat khususnya pada sepeda motor. Terdapat beberapa komponen pengapian dalam sepeda motor diantaranya CDI (*Capasitor Discharge Ignition*), koil (*ignition coil*), dan busi (*spark plug*). Sistem pengapian bahan bakar berperan sebagai pengatur proses campuran udara dan bahan bakar di dalam silinder pada langkah kompresi.

Pada penelitian ini dilakukan pengambilan hasil Torsi, Daya, Konsumsi bahan bakar, dan percikan bunga api busi antara CDI *Racing Rextor* dan CDI *Racing BRT-I MAX*. Pengambilan data torsi dan daya menggunakan metode *throttlet* spontan. Tahapan *throttlet* spontan ini dimulai dengan menghidupkan mesin kendaraan motor kemudian *throttlet* distabilkan pada 4000 rpm. Setelah itu putar *throttlet* sampai putaran maksimal. Hasil pengujian ini dilakukan di *dynotest* untuk mendapatkan hasil daya dan torsi.

Perolehan hasil penelitian menunjukkan pada CDI *racing rextor* memperoleh hasil tertinggi dibandingkan CDI standar dan CDI *Racing BRT*, hal ini disebabkan karena percikan bunga api pada CDI *Racing Rextor* lebih stabil dan cepat juga hasil percikan bunga api yang besar dibandingkan CDI standar dan CDI *Racing BRT*. Torsi tertinggi 11,64 (N.m) sedangkan daya tertinggi diperoleh hasil 15.9 Hp.

Kata Kunci: CDI, Busi, Yamaha Vega R New, kinerja motor.

**EXPERIMENTAL STUDY ON THE EFFECT OF THE VARIATIONS OF
2 TYPES OF CDI RACING TO MOTOR PERFORMANCE AND FUEL
CONSUMPTION OF MOTOR GASOLINE 4 STROKE 125 CC FUEL
PERTAMAX PLUS**

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ABSTRAK

In Indonesia The development of the world of transportation is very rapid, especially on motorcycles. There are several ignition components in the motorcycle; CDI (Capasitor Discharge Ignition), coil (ignition coil), and spark plugs (spark plug). Fuel ignition system as regulator of process and fuel in cylinder at compression step.

At this time do take the results of Torque, Power. Fuel consumption, and sparks between CDI Racing Rextor and CDI Racing BRT-I MAX. Torsion and power retrieval using spontaneous throttel method. This spontaneous throttel stage begins with the engine then to the throttel stabilized at 4000 rpm. After that turn throttel until maximum rotation. The test results are performed in the dynotest to obtain the power and torque results.

The results of the research are shown on CDI racing rextor by the highest results compared to standard CDI and CDI Racing BRT, this is because CDI Racing on CDI Racing Rextor is more stable and fast and CDI Standard and CDI Racing BRT. The highest torque is 11.64 (N.m) while the highest power is 15.9 hp.

Keywords: CDI, Spark plug, Yamaha Vega R New, motor performance.