

Delivery Distance Testing On A 155 Cc Matic Motorcycle With Variations Of Disc And Brake Disc Shape

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ABSTRACT

Most of the motorcycles that people use today use disc brakes. This happens because disc brakes are considered to be faster to reduce vehicle speed because friction and heat dissipation speed are better than drum brakes. This study aims to determine the variations of the combination of discs and brake pads that have the shortest braking distance, in this study I used 9 variations of the combination of discs and brake pads which used genuine parts, local canvases, racing canvases, and used disc discs. original genuine parts, racing discs with a standard diameter and racing discs with a diameter of 265 mm. This brake test is carried out by setting up a 100 m (80 m + 20 m) track and the motor is driven at a speed of 60 km/hour from 0 m-80 m then at the final 20 m meter the speed will be stabilized at +-60 km/hour to then brake from the specified point until it stops to measure the distance and time when the brakes are started until the vehicle stops. In this study, the shortest results at the time of testing were with a distance of 23.55 meters and a time of 02.19 seconds and for the longest one was a distance of 34.90 meters and a time of 04.59 seconds.

Keywords: *shortest distance and time, disc disc, brake lining*