

Comparison of the Use of Single Piston Caliper with Double Piston Caliper Against the Distance and Braking Time on the Front Wheels of Yamaha Nmax 2016 Motorcycle

by

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ABSTRACT

The purpose of this study is to find out about the braking system on the front wheels of Yamaha nmax 2016 with two different calipers, namely single piston caliper and double piston caliper with variations in brake lever pressure and variations in walking speed with a predetermined distance of 200 m. The research method used is the comparative method. Determine that is 200 m. The research method used is the comparative method. The results of research based on different caliper dau, namely single piston caliper and double piston caliper based on test data that double piston caliper is less distance and time than single piston caliper which is proven in research data that has been obtained during research practice, with the difference in braking distance using single piston caliper and double piston caliper with a mean of 1,981 m from the results (6, 061 – 4, 908) with variations in brake lever pressure from 1 Kg, 2 Kg, 3 Kg, and 4 Kg, with speed variations of 20 Km/h, 30 Km/h, 40 Km/h, 50 Km/h, and 60 Km/h. Which is applied to two different calipers, namely single piston caliper and double piston caliper. So the conclusion is that the double piston caliper is more safety against use on the front wheels of the 2016 Yamaha nmax, and also minimizes the distance and time in the braking process of the 2016 Yamaha nmax vehicle.

Keywords: Distance, Time, single piston caliper, double piston caliper