DESIGN AND BUILD A BRAKE FLUID TEMPERATURE MONITORING SYSTEM TO PREVENT BRAKING FAILURE ON MOTORCYCLES

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ABSTRACT

In this study, arduino uno is used as a microcontroller that regulates the entire brake oil temperature monitoring system, matic motorcycles are used as a basic material used to test the brake oil temperature monitoring system because automatic motorcycles often fail to brake, the purpose of this research is to prevent braking failure on disc brakes that have a safe temperature limit according to the type of brake fluid used, which is marked with the code DOT (Department of Transportation). There are 3 warning signs given by the system to prevent braking failures, the first at a temperature of 125°C with a standby warning, the second at a temperature of 135°C with a warning, and the third at a temperature of 145°C with a danger warning, each warning is marked with the sound of the alarm sound and the life of the RGB LED light that can change according to the level of danger that occurs.

Keywords: Arduino Uno, Motorcycles, Braging failure, Disk brake