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A BRIEF REVIEW ON THE INTELLIGENT BRAKING SYSTEM

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ABSTRACT

Using the built-in system architecture, the braking mechanism was developed and integrated to the vehicle to guarantee the safety of the driving phase. The majority of crashes occur as a result of the driver's failure to apply the brakes in a timely manner. However, throughout this project's development, the braking mechanism is specified such that the brake should be applied depending on the ultrasonic sensor and the vehicle's speed. Cars are now equipped with active protection systems to minimize the danger of accidents, which are common in metropolitan areas. The most popular types are Antilock Braking Systems (ABS), Traction Control, and Stability Control. Various kinds of sensors are employed in these gadgets to constantly monitor the vehicle's surroundings and react in an emergency scenario. An ultrasonic wave emitter on the vehicle's front side is used in the intelligent braking system. Furthermore, the receiver is mounted on the vehicle's front end and receives a reflecting ultrasonic pulse. The distance between the problems and the vehicle is determined by the reflected wave (detected pulse), while the car's speed is determined by the RPM counter. The microcontroller assists the identification pulse information in shifting the foot lever to apply the brake to the automobile, which is unexpected for safety reasons.

KEYWORDS: *ABS, brake, Hydraulic Brake, Intelligent, Microcontroller, Sensor,*

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