

Abstract - Vehicles are people's needs in living their daily lives. In Indonesia, the use of vehicles, especially motorcycles, is increasing as the population increases. The problem that arises related to the problems above is the rate of theft of motorcycles is increasing due to the ease of breaking into the ignition key and does not require a long time. In this final project, a motorcycle security system is created that uses the fingerprints of the registered vehicle owner to turn on and / or turn off the motorcycle ignition. This system uses a Microcontroller-based Fingerprint Sensor and transmits fingerprint data to the Arduino to match the fingerprint with the fingerprint of the vehicle owner that has been registered to the Arduino. After making and testing the system on a motorcycle, it can be concluded that the system can be applied to motorbikes and succeeded in opening motorcycle ignition with an average time of 01.42 seconds.

Keywords - Vehicle , Motorcycle, Fingerprint, Sensor, Arduino