

## ABSTRACT

Information security is very important. An information security system should be consider three things: security, authentication, and integrity. To achieve these three things needed a system that can identify users who will access the information. One is the security system on a motorcycle that has been developed. Starting from the handlebar lock, lock lid manufacture using magnetic materials, even to manufacture a special code which is only granted to owners of motorcycles. By leveraging the advantages of the engine cut-off owned motorcycles. In this final project will be a motorcycle safety device uses RFID technology to control the engine cut-off on a motorcycle.

RFID (Radio Frequency Identification) is an object identification process is automated with a radio frequency. There are two important components in an RFID system that is cards (tags) and readers. In designing this tool, RFID is used to turn the engine cut-off systems that exist on a motorcycle for the circuit breakers are required on a motorcycle suddenly, without having to disconnect the battery head which sometimes take quite a long reply. In this system the vehicle owner to act as an RFID tag contains a special series that provides information about the ownership of which is placed on the card given to owners of vehicles and motorcycles as an RFID reader that functions as a reader of the information on the card. So, when the RFID reader detects the RFID tag on the card owner and appropriate motorcycle engine, the system on a motorcycle will be ON. Conversely when the card is not used or the card does not match an RFID tag that is read by an RFID reader, the system on a motorcycle engine will STOP / OFF or alarm will be sound.

So the only owner who has the appropriate RFID cards that could use this bike so hopefully in terms of motorcycle safety is assured with reliability 80 %.

Keyword : *security, RFID, engine cut off*