

## **ABSTRACT**

Motor vehicle at this time has been very much in our environment. Frequent loss of the motorcycle due to carelessness of the owner of the motor vehicle itself and the environment are less secure. Some of the things that often happens in a motorcycle while heating the outside of the house and left lit up. Because often there is something like this is needed motorcycle safety devices such as the security key and sensors that can make motorcycles safer when left switched on or off.

By using the password security system that has been determined based on ATmega328 microcontroller or commonly known as the Arduino Uno, which serves as a security system on a motorcycle, is expected to minimize the loss of motorcycles and motorcycle safety improvements are switched off or on. Seoeda security system design on this bike is one form of application use Microcontroller system that can respond to the input and output will consist of a keypad, LCD (liquid Crystal Display), Reed switches (speed sensor), and Alarm.

At the end of this Project, the expected results were in accordance with a scheme designed. The system password has been specified can be implemented when conditions motorcycles switched off or on. Reed switch (speed sensor) has also been able to function, as security systems motorcycle used motorcycles at the time without using the password first. In addition, the alarm will beep when the security system is turned on. Therefore, overall this tool can run well in accordance with the systems and schemes that are designed.

Keyword : Arduino Uno, Keypad 3x4, LCD 2x16, Reed Switch(speed sensore), Alarm.