ABSTRACT

The need for ease and enhancement of the quality of security sistems owned by motorcycles has encouraged manufacturers to produce sophisticated security sistems. It aims to reduce the action of criminality that often occurs on motorcycles. One of them is *keyless* lock ignition locking sistem.

The *keyless* ignition sistem is a key module that has an RF transmitter to transmit data to an RF *receiver* module on a motorcycle. The device allows the exchange of data can occur within a certain radius. This aims to facilitate the owner of a motorcycle in the opening or lock and turn on or turn off his motorcycle without a key. Because automatically within a certain radius, the motorcycle can be opened by turning the ignition *switch* only. The *keyless* ignition locking sistem also has a unique encryption pattern between the modules. So that if there are two different motorcycles though the same type, there will not happen the *error* of data transfering.

From 30 times testing lock and unlock the keyless motorcycle. And turn on and turn off the motorcycle. This keyless ignition sistem can work properly. The percentage obtained in testing turned on a motorcycle at 83%. The keyless ignition sistem is also a better motorcycle security sistem solution than conventional security sistems on motorbikes.

Keywords: *Keyless* ignition locking sistem, Motorcycle safety sistem, RF (Radio Frequency