

ABSTRACT

Lack of driving experience can cause a lot of harm to the driver, as well as using the vehicle uncontrollably so that the fuel expenditure becomes excessive, especially for two-wheeled vehicle users, the factor is very much one of which is the ignorance of the amount of fuel consumed to travel. As a result, the vehicle users have difficulty in estimating the fuel requirements, the lack of gas stations in each region, and the factor of increasing volume of two-wheeled vehicles rapidly each year.

The above problems can be overcome by applying a system of regulating the power output produced by motorized vehicles, so that can streamline fuel expenditure in driving, where the system can be used manually by users according to the user's desires and the road conditions being taken.

In this Final Project, the design and manufacture of fuel expenditure regulation system is used to regulate the output of fuel produced so that it becomes more efficient. The system has several different mode variants, in each mode variant has a difference in setting the open delay in the throttle position and carburetor so that it can adjust the fuel output according to the mode has been provided. All settings of the system are driven by a servo motor that regulates the opening in the throttle position and carburetor which are integrated with the microcontroller and handlegas.

This final project aims to make fuel expenditure more efficient.

Keywords: *throttle position, carburetor, handlegas, microcontroller, motor servo*