ABSTRACT

Fuel injection is a system for admitting fuel into an internal combustion engine. It has become the primary fuel delivery system used in automotive engines, having replaced carburetors during the 1980s and 1990s. A variety of injection systems have existed since the earliest usage of the internal combustion engine. The primary difference between carburetors and fuel injection is that fuel injection atomizes the fuel through a small nozzle under high pressure, while a carburetor relies on suction created by intake air accelerated through a Venturi tube to draw the fuel into the airstream. Modern fuel injection systems are designed specifically for the type of fuel being used. Some systems are designed for multiple grades of fuel (using sensors to adapt the tuning for the fuel currently used).

The purpose of this final project was to make the engine trainer as a learning tool. It's was designed by consideration and good planning so it can be used easily.

This final project is engine trainer that has been using injection system on carburetion and regulated by the ECU (Electronic Control Unit). It's doesn't only regulate the vehicle fuel system, but also regulates the ignition and charging system. The system of fuel injection, the components and it's function will be explained in this final project.

Keywords: Fuel Injection, Engine Trainer, Carburetors, ECU (Electronic Control Unit)