

# A STUDY ON FUEL INJECTION SYSTEM

## **OF GASOLINE ENGINE**

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#### ABSTRACT

The study on fuel injection system had been carried out for about two semesters. Through out all this time, we learned and experienced many things especially on the basic knowledge of fuel injection system. Thus, in this study we only focused on gasoline engine and did experiments on KE-Jetronic and Motronic. In order to achieve all the objective, we have learned and understood the theories and application related. This report consists of all several chapters. The first chapter is about the introduction to the study. In chapter two, discussion is on the related theories for example car engine system, combustion chamber, four stroke and two stroke engine and fuel injection system that taught in different classes. Chapter three describes about the methods, how we started and completed our final project. Experimental procedures and results of KE-Jetronic and Motronic were explained in chapter four. The last chapter captures the conclusion of our final project. This final project has given us the opportunity to apply some of the methods, theories, and applications in different courses.

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### **CHAPTER I**

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### INTRODUCTION

### 1.1 GENERAL ISSUES

Engine is an important part to the vehicles. Day by day the engines become a more complete success. Modern engines are highly engineered power plants. These engines are designed to meet performance and fuel efficiency demand of the public. The day of heavy, cast-iron engines with its poor gas mileage are quickly drawing to a close. Today, compact, lightweight, and fuel-efficient engines have replaced these engines. Modern engines are made of lightweight engine castings and stamping; non-iron materials (for example, aluminum, magnesium, fiber-reinforced plastics); and newer and smaller fasteners to hold things together. These fasteners are made possible through computerized joint design s that optimizes loading patterns. Each newer engine design has its own distinct personality, based on construction materials, casting configurations, and design.