A STUDY OF SAFETY FACTOR IN THE DESIGN OF PASSENGER CARDS AND MOTORCYCLES BY RIZAL SHARIL BIN ZABRI FAKULTI KEJURUTERAAN MEKANIKAL OCTOBER 1999

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It is hoped that this project would give valuable information and further studies on application of SAFETÝ FACTOR ON DESIGN PASSENGER CARS AND MOTORCYCLES.

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ABSTRACT

This work deals with a study on Safety Factors In Design Of Cars And Motorcycles. Case studies on safety factors in design of vehicles like cars and motorcycles are reported. All the information about safety factor is collected in detail. Every aspect in designs of passenger car and motorcycles are studied to find the drawback in the existing vehicles. And also to suggest suitable changes to improve the new design of cars and motorcycles in the future. This includes tips on how to avoid an accident, which is very important. Tips are also given on how to control and handle passenger cars and motorcycles.

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Introduction

CHAPTER 1 Introduction

The study of safety factor in design of passenger cars and motorcycles is very important to our vehicle production future. The vehicle designer must take into account the safety of the driver, passengers and other road users. Although the vehicle cannot be expected to withstand collision with vehicle or other object. The use of careful design of the overall shape, the selection of suitable materials and the designs of the components can be done to reduce the effects of collision. Also can find that injury causation and characteristic of the vehicle accidents then will determine, to make sure that safety factor will reduce the injury and an accident from this studied.

1.1 The Objective

- a) To find every factor that lead to accidents and to give a suggestion to designers to design a safer passenger car and motorcycles.
- b) To find the drawbacks in the existing design of passenger cars and motorcycles and to suggest suitable changes.
- c) To give information to all the drivers about safety features in vehicles so that the drivers will be more confident when handle the vehicle.
- d) To reduce accidents by at least 20% when changes and modification are incorporated into passenger cars and motorcycles.

1.2 Collection of Information

All the information that related to the study of safety factors is collected. This information are collected in different way. Some of the information is collected from the government department and half of them are collected from multimedia like Internet.

1.2.1 Interview with person met with accident.

3 persons were interviewed to collect the data about accidents. This includes:

- a) The types of the vehicles that been used;
- b) When and how the accident happened;