A CASE STUDY ON ELECTRICAL AND ELECTRONICS SYSTEM OF A CAR -PROTON PERDANA E55A- SOHC

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APRIL 2001

ACKNOWLEDGEMENT

In the name of ALLAH SWT, The Most Beneficent and Most Merciful.

We would like to acknowledge with grateful thanks the assistance rendered by our supervisor, Dr. Abdul Rahim Bin Atan, for his invaluable suggestions and guidance in accomplishment of this case study project. Our appreciation is also extanded to PROTON especially to En. Syed Abdullah and his instructor, En. Zainuddin from Tegas Auto Sdn. Bhd., all the lectures, staff especially En. Sulaiman and En Sopi at Faculty of Mechanical Engineering, who had been so helpful throughout fabrication of the project.

Finally, thanks to our families and colleagues for their support and encouragement.

ABSTRACT

This study case of electric and electronics system of a car is done by selecting our nation's produced car, the Proton Perdana E55A 4G63 – SOHC (1997). We start doing this study by listing the topics should be covered by us with help from our study case advisor, Dr Abdul Rahim Bin Atan. We have discussed that we are going to do it thoroughly and at the same time try to understand the requirement needed for this project.

Our advisor has guided us to SAGA ACADEMY .Then the head instructor had helped us in giving numerous data and diagram for our references . We had a WORKSHOP MANUAL IN ELECRICAL WIRING for Proton Perdana. Next we learned how to read wiring diagram s, wiring harnesses and circuit diagrams. The manual is very detail and we have to select important point from it.

We started to discuss the project during our free time and divided jobs between us. Everyone in this group have played a good role in this study project. The cooperation between us is good we live together in a house. Even our advisor lives near to our resident and it's easy to talk and discuss with him.

The last portion of the project is typing and editing the data and points. We refer a study case in another project and begin to work on it. The use of information technology is used too in this project. A full set of multimedia computer with printer, scanner plus a modem for the use of printing, scanning and surfing for data, pictures and information in the web.

Finally the study case project has been done and we have experienced some good value and gained knowledge through this project. We hope this project be a guide for our fellow friend in both mechanical engineering and UiTM student.

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INTRODUCTION

Through many years ,technology evolved through time . Electrical and electronics system have revolutionized from a big circuit to a circuit that a small a cubic centimeters . The technology of electrical and electronic system of car had a history of itself.

The changes will have an impact in four main areas of vehicle operation : -

- 1.environmental
- 2.safety
- 3.ergonomics

4. social infrastructures

The use of ECU,BCM,TCS,ABS and many more have pointed that car development will not favor mechanical aspect anymore but mechanical and electrical will fixed a new future of car.

The key issues in automobile design for the next century will be safety and environment . Fortunately ,rapid development in electronics will help these area. The time delay between the development of new automotive electronic devices and their introduction into series production is continuously reducing. Each year , as the capabilities of electronic system improve, their size ,weight ,cost and power consumption is reduced.

Automotive electronics will continue to grow even further in importance in the next century, requiring all those involved in designing, selling and maintaining vehicles to have a sound knowledge of these system.

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