THE EFFECT OF DIFFERENCE TYPES OF MUFFLER ON NA ENGINE THROUGH EXPERIMENTAL-FLOW

MOHD FAZLI BIN ABDUL RASHID
(2005268772)

BACHELOR ENGINEERING (HONS) (MECHANICAL)
UNIVERSITI TEKNOLOGI MARA (UiTM)
APRIL 2009

"I declared that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree"

Signed : .....

Date : 21/5/09

Mohd Fazli Bin Ab Rashid

UiTM No : 2005268772

ACKNOWLEDGEMENT

Alhamdulillah...Thanks to Allah The Almighty because finally I have complete of this final project to fulfill the requirement of Mechanical Engineering Faculty for graduation. Firstly, I would like to express my thanks to my dedicated advisor; Mr Idris bin Saad, for his commitment, guidance and credibility in the preparation stage of this report. His cooperation and advice help me to prepare a well-prepared report at last.

Secondly, I would like to thank to Mr Mohd Mustaffa Hafiz B Khalil for his cooperation and give the information is so valuable and important for my report.

Thirdly, I also would like to express my pleasure to automotive lab technician Mr. Amin for their kindly in giving me help and advice for report. Lastly, I also would like to thanks to my parent and classmate whom give me encouragement and moral support to complete of this final project. Wassalam....

ABSTRACT

Main function of muffler for IC engine is to provide noise silencing along with pollutant emissions compliance. It is equally important that these environmental objectives be achieved without significant impingement on the vehicle performance. A desirable exhaust system would have low weight and low backpressure for good engine performance and fuel economy, while providing low emission and sound levels. Modification on the muffler will help to improve it performance of engine. This project will focus on the effect of power, torque and air fuel ratio by changing the muffler with two different size and flow. Experimental by using Hub Dynamometer was carried out in order to produce the result for Proton 1.6 engine. The result was compared to the standard engine in order to observation it effects.

TABLE OF CONTENTS