

LAPORAN PROJEK TAHUN AKHIR
KURSUS DIPLOMA LANJUTAN KEJURUTERAAN JENTERA
KAJIAN KEJURUTERAAN, I.T.M., SHAH ALAM

DESIGN AND FABRICATE A GEARBOX FOR A GIVEN
ENGINE SPECIFICATION

BY :

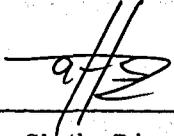
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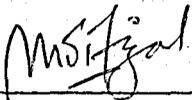
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A report submitted to the School of Engineering, Institut Teknologi MARA, Shah Alam, in partial fulfillment of the requirements for the Advanced Diploma in Mechanical Engineering.

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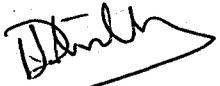
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PREFACE

The objective of this project is to design and fabricate a gearbox that can be used in automobiles.

This is achieved by carrying out an analytical design based on strength, wear and durability. The gear ratios are obtained from the dynamic analysis considering tractive effort, resistances to motion etc.

The gear design is based from Lewis Theory and further it is improved by using AGMA Standard Computer is used in the gear design analysis. The language used in the program is Fortran 80. Shaft, splines, synchromesh sleeve and other are designed based on American and British Standards.

A model has been made using the results from the analytical finding. Finally the working drawings are prepared.

ACKNOWLEDGEMENT

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Preface

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