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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
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بالرسالة صفحات لم ترد بالاصل



**AIN SHAMS UNIVERSITY
FACULTY OF ENGINEERING
AUTOMOTIVE ENGINEERING DEPARTMENT**

MECHANICAL CHARACTERISTICS OF BRAKE AND CLUTCH LINING MATERIAL IN FRICTION AND WEAR

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE M.Sc. DEGREE IN MECHANICAL
ENGINEERING (AUTOMOTIVE)**

BY

Eng. RAMADAN ABD-ALLAH MOUSTAFA MOHAMED
B.Sc. in Mechanical Engineering, Minia University, 1979
Diploma in Mech. Eng. (Automotive), Ain Shams University, 1992

Supervised By

Prof. Dr. M. S. Diwdar

**Prof. of Automotive Engineering
Faculty of Engineering - Ain Shams University**

Dr. A. I. Abdel-Aziz

**Lecturer of Automotive Engineering
Faculty of Engineering - Ain Shams University**

Cairo, EGYPT 2001

CVC

EXAMINERS COMMITTEE

The undersigned certify that they have read and recommended to the Faculty of Engineering, Ain Shams University for acceptance a thesis Titled " MECHANICAL CHARACTERISTICS OF BRAKE AND CLUTCH LINING MATERIAL IN FRICTION AND WEAR", Submitted by Eng. **Ramadan Abd -Allah Moustafa Mohamed**, in Partial fulfillment of the requirements for the degree of M.Sc. in Mechanical Engineering (Automotive).

Examiners	Signature
1- Prof. Dr. FAWZY M. EL - SAYED. Professor of Automotive Engineering. Faculty of engineering, El- Menia University.	<i>EL-SAYED F. M.</i>
2- Prof. Dr. TAYSIR A. NOSSEIR. Professor of Automotive Engineering. Faculty of engineering, An Shams University.	<i>T. Nasseir</i>
3- Prof. Dr. MOHAMED S. DWIDAR. Professor of Automotive Engineering. Faculty of engineering, An Shams University.	<i>M. S. Dwida</i>

STATEMENT

This dissertation is submitted to Ain Shams University for the Degree of M.Sc in Mechanical Engineering (Automotive).

The author has carried out the work included in this thesis at the Department of Automotive Engineering, Faculty of Engineering, Ain Shams University.

No part of this thesis has been submitted for a degree or a qualification at any other University or institute.

Date: 25 - 11 - 2001

Signature: Ramadan abdallah moustafa

Name: R. A. MOUSTAFA

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*To my parents and brothers
in gratitude*

*To my wife and my
children Amal, Manal,
Hyatt, Adel and Mohammed*

