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MECHANICAL ENGINEERING FACULTY
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**FINAL YEAR PROJECT REPORT
ERGONOMICS STUDY OF MUSCULOSKELETAL DISORDERS IN AN
ASSEMBLY PLANT**

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IN THE NAME OF ALLAH, THE MOST GRACIOUS AND MOST MERCIFUL

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ABSTRACT

One of the main objectives of the project is to determine and evaluate the level of ergonomics awareness in our industries.

Therefore, the project had been carried out at one of the leading automotive assembler in January 2000.

As the workers are the main subjects in this project, the checklist and the questionnaires were used as the tools in order to get the valuable data for us to do an analysis. By using statistical technique for social science or SPSS software for window, we can get the relationship between the dependents and independent variables consist in the questionnaires.

The early chapter in this project is the introduction of the musculoskeletal disorders and the workplace factors that contribute to the musculoskeletal disorders. Then we will explain about the processes for assembly of the bus chassis before we commence with the methodologies and analysis for this project.

Finally, the conclusions and recommendations were made as a corrective and also for preventive action to eliminate and reduce the level of musculoskeletal disorders and increase the ergonomics awareness for the employees and employer.

TABLE OF CONTENT

<u>Chapter</u>	<u>Page</u>
Acknowledgement	i
Abstract	ii
1. Objective of the Project	1
2. Introduction to Ergonomics	2
3. Musculoskeletal Disorders	4
i. Low Back Pain	4
ii. Neck Pain	8
iii. Knee Pain	11
4. Workplace Risk Factors	16
i. Heavy Physical Work	16
ii. Lifting and Forceful Movement	16
iii. Awkward Postures	17
iv. Static Work Postures	17

1. OBJECTIVES OF THE PROJECT

The primary objective of this project is to get a better knowledge about the ergonomics application in industries through an actual case.

From our study, most of the concept of ergonomics are not applied in the assembly line. Therefore, through this project, we adopt some of the ergonomics concepts and principles that may be applicable to assembly line. Some of the examples are the correct working height, reduce unnecessary manual handling and suggestion to design proper workplace and equipment.

During this project also, we will try to find out the types of musculoskeletal disorders suffered by the workers and the relation between musculoskeletal disorder, the working postures and the workers.

Upon completion, suggestions and ergonomics solutions will be made available and provided to the assembly line in order to improve not only the productivity and quality, but also the health and safety of the workers.