

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT OF A PROTOTYPE
MECHANICAL ROAD CLEANING
MACHINE**

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ABSTRACT

Cleaning is a necessary factor of daily routine process. Effective cleaning and sanitizing help and protect the health of human beings directly and indirectly. The Road cleaner is used to keep our surroundings clean. So that we feel fresh while walking on the streets. My objective of this project is to design and analysis a Mechanical Road Cleaner Machine and to fabricate an affordable and functional Mechanical Road Cleaner Machine. The problem that most users faced is most of the road cleaning machine nowadays is expensive, hard to be operated and not a user friendly. Other than that, most of that machine also take time and cost to be operated because they use a power supply that need to recharge and refuel. So, in my project I will try to make an affordable and a machine that is easy to maintain. The expected result is to make a functional road cleaning machine for the user. In conclusion, I hope my project will solve all the problems that usually a user faced.

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Finally, this dissertation is dedicated to my father and mother for the vision and determination to educate me. This piece of victory is dedicated to both of you. Alhamdulillah.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Generally, in the era of modern technology, most of the road cleaning technology is quite expensive and get a lot of electronic component, that's can make a newbie struggling to operate them. Then, most of the modern road cleaning machine also need to recharge or refuel that take time and cost to operate them. Other that, most of them also are quite big to be stored, not portable and very heavy to to be taken anywhere. So, I try to design and analysis a project that can solve all the problems. In my project, I will try to make it more affordable and easy to operate by a user. I also will not use any power supply to save cost and time when using the machine. Portable, small and light also is my priority of this project so that it can be easy to be stored and be taken anywhere.

So, I make some interview to identify the problem that most of the cleaning worker and city council faced and I try to design a product that can help solve their problems. From the answer that I get from them, I try to analysis it. And in that interview also I put some suggestion idea from them so that I can conclude them into my project.

1.2 Problem Statement

Generally, in the era of modern technology, most of the road cleaning technology is quite expensive and get a lot of electronic component, that's can make a newbie struggling to operate them. Then, most of the modern road cleaning machine also need to recharge or refuel that take time and cost to operate them. Other that, most of them also are quite big to be stored, not portable and very heavy to to be taken anywhere. So, I try to design and analysis a project that can solve all the problems. In my project, I will try to make it more affordable and easy to operate by a user. I also will not use any power supply to save cost and time when using the machine. Portable, small and light also is my priority of this project so that it can be easy to be stored and