

FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA TERENGGANU

FINAL REPORT OF DIPLOMA PROJECT

PORTABLE LIFTING MACHINE FOR THE ELDERLY

MARCH 2015

SHAHRUL SHAFIZ BIN HARIDAN

MOHD REZAL BIN ABDUL MUTAHAR

QHAIRUL ADZHAR BIN JOHARI

MOHAMAD TAIB BIN MISKON

"I declare that this report entitled "PORTABLE LIFTING MACHINE FOR THE ELDERLY" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree."

Signature	
Name	: SHAHRUL SHAFIZ BIN HARIDAN
Date	\$4 /04 / 2015
Signature	:
Name	: MOHD REZAL BIN ABDUL MUTAHAR
Date	14 APPIL 2015.
Signature	Chra
Name	: QHAIRUL ADZHAR BIN JOHARI
Date	14/4/2015

ACKNOWLEDGMENT

Praise to the Almighty, we are able to complete the "Portable lifting machine for the elderly" for our final year project. However, it would not have been possible without the kind support and help from our supervisor Sir Mohamad Taib Bin Miskon. We would like to extend our sincere thanks to him. Besides, we are highly indebted to the sum of the lecturer's contributions that have spent their time for the guidance and constant supervision as well as providing necessary information regarding the project and also for their support in completing the project for this semester. We would like to extend our sincere thanks to them very much. We would like to express our gratitude towards our parents and friends, especially to our classmates who are willingly helped us out with their abilities for their cooperation and encouragement which help us in completion in this project. We would like to express our special gratitude and thanks to our coordinator for giving us such good opportunity and experiences in completing this project for this whole semester and developed more understanding in this subject.

ABSTRACT

"Portable Lifting Machine for The Elderly" is a prototype that will ease the work of the elderly where this machine will help them to lift and to place their objects at desired locations. Elder people have a limitation to lift heavy objects such as pots, pails, dustbin and many more. They have less physical ability and their movement is limited as their body structure is not strong enough to perform such activity. Based from this problem, an idea has come where helping the elderly is necessary in order to ease their daily activities. A button that is set to lift an adjustable holder that is attached to the machine later will be pressed so that the holder will be adjusted according to the height of the object. In order to move the machine, the user will need to pull the holder until it reaches the angle that has been set so that the object is securely stable on the machine and no extra force is needed to move the machine. With the invention of this project, it is believed that this project may help the elderly to reduce the risk of hurting themselves.

TABLE OF CONTENTS

		Page
DEC	CLARATION	ii
DEI	iv	
ACI	KNOWLEDGEMENT	\mathbf{v}
ABS	vi	
ABS	vii	
TAE	vii	
LIS	<u>xi</u>	
LIS	xii	
LIST	xii	
CHA	APTER 1: INTRODUCTION	
1.1	Introduction	1
1.2	Problem Statement	1
1.3	Objective	2
1.4	Scope	2
СНА	APTER 2: LITERATURE REVIEW	
2.1	Wheel Barrow	3
2.2	Flower Pot Carrier	4
2.3	Pot Lifter	5
2.4	Pot Clipper	6
2.5	Industrial Lifting Machine	7