

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND FABRICATION OF  
MECHANICAL LIFT SHOES**

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## **ABSTRACT**

This project is presenting a mechanical lift shoe that will help to lift your body up to the highest point and make you taller. This mechanical lift shoe uses a directional control valve as it switches to lift up and to go back down. Many times, we wish we would reach the highest point on our shelves or the furniture at home in order to take something out or to clean the place easily. The objective of this mechanical lift shoe is to create a portable shoe for everyone to use for reaching a higher place without the use of a ladder. Before this, people use mostly a ladder to reach out a higher place which the disadvantage of using a ladder is that it is hard to bring the ladder everywhere and if we need to move to reach other places, we need to get back down from the ladder and place the ladder again to the other location which is time-consuming and use too much energy. As for this mechanical lift shoe, it is easy to bring it everywhere as it is lightweight, and you can walk freely as you wear this shoe. This project really can help people solve their problems in reaching a higher place. After doing some research, the mechanical lift shoe can help to lift up our body to reach up higher a place in the best way possible.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of Study**

In this era, people will mostly use a ladder or stool to reach a higher place as their height is not capable of doing such a thing. Mechanical lift shoes are compulsory to have, especially for house chores activities and shop owners who placed their product in such higher places.

As we all know, the height of people is different, someone might be a little taller than you and someone might also be much higher than you. Many people also tried to boost their height but generally it is hard to gain more height after your growing phase. The height of a person plays an important role in people's lives. This is because to reach a taller place to take something or clean, you will need to have a high body height. People who weren't born with a high body would have a problem in this case.

This is when people started to use a ladder or even a stool to support their height problem when trying to reach a higher place. Other than that, the uses of ladders and stools have their own disadvantages such as some of the ladders might be too big and too heavy for some people to bring it everywhere. The ladder also is not portable enough to use in all kinds of situations.

To overcome these problems, a mechanical lift shoe is proposed to help lighten people's burden to reach a higher place. This mechanical shoe is portable as it is lightweight, easy to handle and easy to move to other places while wearing the shoes. This mechanical shoe uses a directional control valve as it switches to make the shoes go up or down. It uses a concept like a scissor for the lifting process in which a metal flat long metal is connected in a zigzag shape.