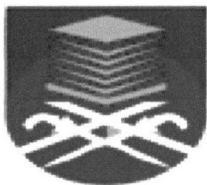# WIPER PROTECTION

This thesis is presented in partial fulfillment for the award of

**Bachelor of Electrical Engineering (Honours)**

**UNIVERSITI TEKNOLOGI MARA**

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# ABSTRACT

This project generally introduces to make the wiper of the car can stand last longer. Generally, this project consists of temperature sensor, microcontroller (PIC) and stepped motor. Temperature sensor senses the temperature and sends data to peripheral interface controller the process data given. Then the peripheral interface controller sends data to stepped motor to make an appropriate action. This project will help the car user to make their wiper can stand last longer.

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# CHAPTER 1

## INTRODUCTION

### 1.1    Introduction

Some time we see some people lift the wiper after park the car. The purpose is to make sure that the viper can use last longer. When wiper is not lift, the wiper blade can be damage because of the heat from car mirror and its own pressure. This will reduce the lifetime of the blade. Therefore this system is creating to lift the wiper automatically.

The sensor is palace at car to detect the temperature. The mirror absorbs the heat from the surrounding. When the temperature is hot enough, the sensor will detect and send signal to controller to lift.

The program is writing and install to the controller where by the controller can be function. When the controller receive the signal, its will process and send to the motor to operate. After that the motor will on. The function is to lift the wiper. When the car is on, the actuator will automatically will go back from initial position so that the wiper can be use again.

In this project, first the scope and definition of wiper protection are given. Then, the hardware and software design that are used in this project will be described. Finally, the result from the hardware and software will be discussed.