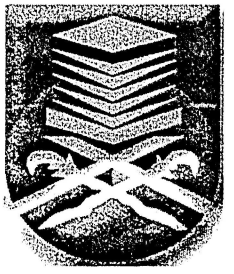

PRELIMINARY WORK ON IMPROVING AIR CONDITIONING COP BY USING CONDENSATE WATER TO ENHANCE THE COOLING PROCESS

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AUTHOR DECLARATION

"I declared that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree."

Signed : .....

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ABSTRACT

This thesis presents a preliminary work on improving air conditioning COP by using condensate water to enhance the cooling process. The aim of the project is to gain the preliminary results of air-conditioning COP by using condensate water obtained during the air-conditioning process. The purpose of the project is to build the basic workable automobile air conditioning test bench where it will be use for other research in the field of increase the existing air-conditioning COP by make use of condensate water which is bi-product of the evaporation process. The basic operations of the test bench is used the automotive air conditioning system and condensate water is accumulate from the evaporator. The scopes of this project are to design the test bench of the air-conditioning system by using Proton Saga BLM air-conditioning parts, to fabricate the design and ensured that the system will function as desired and run the preliminary experimental test to determine the actual air-conditioning COP and the flow rate of the condensate water. This project involved some literature review of the vapour compression refrigeration system, Coefficient of Performance (COP) theory and the basic air conditioning parts involves in construction of the test bench. The result of this project is the workable air conditioning test bench and the actual COP and condensate data from the system

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