



**CONCEPTUAL DESIGN ON STEAM ENGINE FOR MOTORCAR:
ENGINE DEVELOPMENT**


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“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”

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ABSTRACT

This project is about the conceptual design for the engine part of the steam engine that can be installed to the motorcar. Nowadays, the world is faced the global oil crisis where affected the oil price in the market. In way to overcome the problem, the development of conceptual design of the steam engine for motorcar has been made. This project is extensively focused on the conceptual design of the engine part of the steam engine. The engine is a main part that received the generated steam from steam generator to obtain an engine power, then transmitted to gear box to obtain torque for moving a motorcar. The inline vertical geometry is the ideal geometry of the engine to install for motorcar because of the engine length and width. The vertical engine has presented the ideal engine size for the limited space hood. The conceptual design consists of cylinder bore and stroke, piston, connecting rod and crankshaft in order to obtain the optimum performance for motorcar engine. The concept has been designed by using CATIA V5R14 software. The engineering calculation is done to determine the optimum power of the engine with accurate dimension of cylinder bore and stroke to run the engine by using pressure from generated steam.

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