AUTOMATIC CAR JACK

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"I declare that this report entitled "*your title*" 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 candidature of any other degree."

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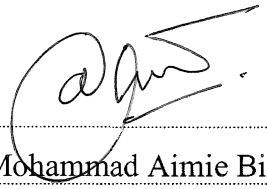
Signature	:	
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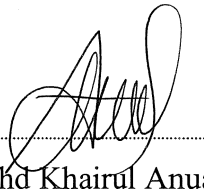
Signature	:	
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ABSTRACT

The work in this study is in general described, an electrically operated car jack. A scissor type, automatically operated by switch buttons consists of a base, a load engaging head, gearing system and stabilizer base. The prototype includes motor powered from the cigarette lighter adapter.

The motor with gearing system will be the lifting mechanism. When the car needed to be lifted, just press the button and release the button at a desired height level. The common problem faced by the current available car jacks in the market is it is manually operated and needed physical effort to lift the vehicle. All the analysis and results such as the torque needed and gearing ratio is important in this project before needed to be developed.

The developed automatic car jacker is based on the result and analysis part to lift a kancil car (682kg). The stress and Von Mises stress are additional analysis on the gearing parts to know how much stress applied on the system to avoid failure. The developed automatic car jacker is a success which it able to lift a kancil's car according to the set scopes.

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