

Design and Analysis of Rockers Bogie

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Abstract: *The Rocker-Bogie Mobility system was created with slow speeds in mind. It has the ability to overcome hurdles. When passing over a large impediment, however, the car basically stops going while the front wheel climbs the obstacle. Dynamic shocks are reduced when operating at low speeds. The front wheels are driven against the impediment by the rear wheels in order to go over it. The front of the car is lifted up and over the obstruction as the front wheel rotates. The middle wheel is then forced up against the impediment by the rear wheel and hauled up and over by the front wheel. Finally, the front two wheels drag the rear wheel over the obstruction. The vehicle's forward progress is slowed or stopped during each wheel's traverse of the impediment. The goal of using this mechanism is to reduce energy consumption by shifting the bogie's centre of mass vertically. The major goal of this project is to testify whether the how the rockers bogie impliment this mechanism on analysis software*

Keywords: Rocker-Bogie, impediment

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