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Parametric study of ground vehicle suspension system (Article)

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Abstract

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One of the missions of automotive engineering is to reduce mass, vehicles components complexities, subsystems and systems without sacrificing expectations of the performance. Therefore, the development in suspension system of the vehicles invites many types of sus-pension system to improve the performance in stability and handling the vehicles. This study attempts to analyze the performance of two types of suspension architecture system that has been used by passengers' car. The result of this analysis such as camber, toe and caster angle will be compared to each various types of suspension system to discover the highest performance of the suspension system. Kine-matics analysis is the analysis of the motion of bodies that undergo displacement and rotation which concerns with computational modeling. Thus, software like ANSYS was used to show the association of kinematics with different types of suspension system © BEIESP.

Author keywords

Camber | Caster | Ground vehicle | Suspension | Toe angle

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