Estimation techniques for energy-absorbing seat in armored wheeled vehicle

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The paper outlines the primary affecting factor after blowing up an armored car by a mine. It is the influence of high accelerations on a crew. A promising way to reduce the high accelerations is to use an energy-absorbing seat design. The design requires engineers to calculate the optimal design features of the seat. This paper describes a method of calculating the energy-absorbing seat design for both the existing models of the armored wheeled vehicles and for those, which are at the design stage.

Keywords: *armored vehicle, crew, seat, mine protection, LS-Dyna, MRAP.*

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