





AUTOMOTIVE SERIES

A NEW METHOD FOR COMPUTING THE BRAKING DISTANCE USING THE MEASURED DATA AT THE BRAKING START MOMENT

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Abstract

It is given a method for computing the braking distance of the vehicles with anti-lock brake system on frosty surfaces. In general theoretical formulas for braking distance are given for particular surfaces and for given vehicle mass, but in practise numerous difficulties appear. Our method uses the data collected right at that moment when the vehicle started braking, so that data contain the best informations about the respective conditions when the vehicle runs. The ideas from this work can be used to invent other electronic components to improve the vehicles.

Keywords

braking distance; equations with separable variables, Newton's law, anti-lock brake system