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FACTORS AFFECTING ON THE INTENSITY OF CHANGES IN THE TECHNICAL CONDITION OF VEHICLES

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Under different operating conditions, vehicle reliability indicators will vary. The following factors are identified that influence the intensity of changes in the technical condition of cars: production, operating conditions, operational and production.

Production factors influencing changes in the technical condition of a car include the design features of a given car brand; homogeneity of production (characterized by dispersion of wear periods for the same parts); reliability.

Operating conditions include road conditions, traffic conditions and intensity, natural and climatic, seasonal conditions, environmental aggressiveness [1].

Road conditions and terrain determine the operating mode of the vehicle. They are characterized by the technical category of the road, the type and quality of the road surface, which determine the resistance to vehicle movement, and the elements of the road in plan and profile (road width, curvature radii, slope of ascents and descents).

In turn, the operating mode of the vehicle affects the reliability and other properties of the vehicle and its components.

Wear and disruption of the road surface increase the risk of failure of vehicle components by 14...33%.

Traffic conditions and intensity are characterized by the influence of external factors on the driving mode and, consequently, on the operating mode of the vehicle and its components. These factors include transportation conditions: speed of movement, length of loaded trip *l*, mileage utilization factor *b*, load capacity utilization factor *g*, trailer utilization factor K_{pr}, type of cargo transported [2,3].

There are three groups of operating intensity: 1) outside the suburban area; 2) in small towns with a population of less than 100 thousand people, and in the suburban area; 3) in large cities with a population of over 100 thousand people.

Natural and climatic conditions are characterized by ambient air temperature, humidity, wind load, level of solar radiation and some other parameters. These conditions affect the thermal and other operating modes of the units and, accordingly, the intensity of changes in their technical condition. For the conditions of Russia, where a wide range of natural and climatic conditions is represented, areas of very cold, cold, moderately cold, moderately hot, dry, and subtropical climates are distinguished.

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