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CONCEPT OF SUPPORT METHODS AND MANAGEMENT OF ROAD TRANSPORT PERFORMANCE

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During operation, a change occurs in the technical condition of the vehicle and its components, which can lead to partial or complete loss of performance. There are two ways to ensure the operability of cars in operation with the lowest total material and labor costs and loss of time: maintaining operability, called technical maintenance (TM), and restoring operability, called repair.

The main purpose of car maintenance is to prevent and delay the moment of reaching the limit state. This is ensured, firstly, by preventing the occurrence of a failure by monitoring and bringing the parameters of the technical condition of vehicles (unit, mechanism) to nominal or close to them values; secondly, by preventing the moment of failure as a result of reducing the intensity of changes in the technical condition parameter, reducing the rate of wear of associated parts due to lubrication, adjustment, fastening and other work. Based on the frequency, list and labor intensity of the work performed, maintenance is divided into the following types: daily (DM), first (TM-1), second (TM-2) and seasonal (SM) [1].

The main purpose of the DM is general control of the technical condition of the vehicle, aimed at ensuring traffic safety, maintaining proper appearance, refilling with fuel, oil and coolant, and for some types of transport, sanitary treatment. DM is carried out after the rolling stock is in operation and before it leaves the line.

TM-1 and TM-2 are carried out upon reaching a certain mileage (depending on the type and model of the vehicle, TM-1 - after 2...4 thousand km, TM-2 - 6...20 thousand km). During TM-1, diagnostics and maintenance of components that ensure traffic safety are carried out; during TM-2, diagnostics and maintenance of elements that ensure the traction and economic properties of the vehicle are carried out [2,3].

The main purpose of SM, carried twice a year, is to prepare cars for operation in the cold and warm seasons. For general climatic conditions, SM is combined mainly with TM-2 or TM-1 with a corresponding increase in the labor intensity of the main type of service.

Maintenance operations are carried out with preliminary control. The main method of performing control work is diagnostics, which is intended to determine the technical condition of the vehicle, its units, components and systems without disassembly and is a technological element of maintenance.

In addition to direct maintenance work, maintenance also includes work carried out to maintain the proper appearance and sanitary condition of the car: cleaning, washing and drying.

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