



MVM20100055

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ANALYSIS OF THE RELIABILITY OF THE MOTOR VEHICLE BRAKES BANDS AND OF THE OPTIMAL STRATEGY FOR PREVENTIVE MAINTENANCE

ABSTRACT: This work presents a possibility to find the optimum solution in the maintenance vehicle brakes bands when the criteria functions are maximal availability and minimal costs maintenance. These two criterions lead to several solutions of the maintenance of clutch systems therefore it was necessary to seek for a trade off solution. The base of the presented methodology is made of the reliability parameters of the analysed vehicles, got on the base of the monitoring the behaviour of the vehicle, from the aspect of appearance the failure in a real conditions of exploitation.

Only one strategy of maintenance solution, for given motor vehicle and given condition of using, is optimal. In this case, there is got the best worth of availability, reliability, minimal costs of using and maintenance, and with that reduction of all life cycle costs.

The task of optimisation of maintenance system is contained to find that optimum. This work has that aim the optimisation of maintenance system motor vehicle is to understand as finding then trade off solution, which will be the most acceptable by maintenance of disposal vehicles.

The optimisation of maintenance system with application model of preventive maintenance, is often completed finding answer if it is useful to apply preventive maintenance, and if it is, find how much work time is to apply dealings of preventive maintenance.

The aim of work is determining optimal maintenance strategies of the vehicle brakes bands ordered concrete vehicle, on base showing its reliability, as follows from data of exploitation.

KEYWORDS: motor vehicle, maintenance, optimisation, reliability, availability, costs

INTRODUCTION

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