

DETERMINATION OF THE OPTIMAL STRATEGY FOR PREVENTIVE MAINTENANCE OF THE CLUTH MOTOR VEHICLES USING POLYCRITERION OPTIMIZATION

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ABSTRACT *This work presents a possibility to find the optimum solution in the maintenance cluth of motor vehicle when the criteria functions are maximal availability and minimal costs maintenance. These two criterions lead to several solutions of the maintenance of cluth systems therefore it was necessary to seek for a trade off solution.*

Key words: motor vehicle, maintenance, optimisation, reliability, availability, costs

1. INTRODUCTION:

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 cucle costs.

The tasc of optimisation of maintenance system is conteined to find that optimum. This work has that aim the optimisation of maintenance system motor vehicle is to understand as finding then traden 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 findngn answer if it is usefull to applicate preventive maintenance, and if it is, fluid how much work time is to applicate dealings of preventive maintenance.

The aim of work is determinating optimal maintenance strategics of the cluth of motor vehicle ordered concrete vehicle, on base shoving its reliability, as follows from data of exploatation.

2. DTERMINATION OF THE PARAMETER RELIABILITY OF THE CLUTH MOTOR VEHICLE

By reasai of planing maintenance measure a motor vehicle, foreseeing its duration life and quality mark of vehicle constituent parts, as whole vehicle, it's necessary to find parameters its maintenance.

The best frequent ordered parameters of maintenance are: frequency phenomenon of notice, reliability, unreliability, notice intensity and work time without notice.

If it's possibly find lafulness, which desobey function of reliability distribution, it's possibly find all maintenance parameters, too that lawfulness is possibly find if exist data about phenomenon of notice the vehicle during its using.

On base those data, it's possibly find lawfullness of notice phenomenon during the work time.

Finding corresponding matematics model, which can present lawfulness of vehicle behavior, in point of wiew phenomenon of incorrectivess, is one of fundamental elements for prognosis vehicle behaviour in the future and optimization of system its maintenance.

