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Konkin V.N. Influence of the nonlinear characteristics of support of the dynamics of the diesel `s housing  
1D80B 02 004 1. Development of the finite-element model of housing

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The new need for controlling the frequency oscillation spectrum of the of diesel's was appeared in the process of development the project of the new locomotive diesel 1D80B 02 004 on the plant named after Malyshev. Such a control, according to the idea of the developers of project, can be realized by changing in the characteristics of the damping supports of frame, on which the diesel generator is placed and which, in turn, is placed on the basic bearer frame of locomotive. As a whole, the solution of problem consists of the following basic stages: the creation of the optimum finiteelement model of the housing of diesel, the mathematical simulation of the supports of power frame with the elasticnonlinear characteristics, conducting the calculated analysis of the influence of such characteristics on the dynamics of entire housing, the preparation of the necessary recommendations.

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