

RESEARCHES REGARDING THE DEVELOPMENT EcoMatic HYBRID SYSTEM

Authors

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Abstract

The paper presents the actual state of development within the researches performed at the University of Pitesti on the EcoMatic Hybrid project. It is developed on the basis of the Dacia Nova/Solenza vehicle. The EcoMatic Hybrid System is organized as a two shafts parallel hybrid with torque addition. In order to lower the restrictions when adapting it on the standard vehicle and also for purposes of research flexibility, it is divided in two parts: the thermal equipment EcoMatic LPG fitted with a CVT, mounted in the front side and the electrical equipment EcoMatic ELECTRA featuring asynchronous electric motor fed with electrical energy from the traction battery and fitted with a two gear ratios transmission with automatic shifting, mounted in the rear side. At the end of the paper, there will be briefly presented the development of the EcoMatic Hybrid System II project, with application on the Dacia Logan vehicle.

Keywords

Parallel HEV, LPG, CVT, electric drive