

## Failure Analysis of the Gasoline Engines Injection System

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**Abstract :** The paper presents the research results of electronic fuel injection system, which can be used for diagnostics of automotive systems. In the paper is described the construction and operation of a typical fuel injection system and analyzed its electronic part. It has also been proposed method for the detection of the injector malfunction, based on the analysis of differential current or voltage characteristics. In order to detect the fault state, it is needed to use self-learning process, by the use of an appropriate self-learning algorithm.

**Keywords :** electronic fuel injector, diagnostics, measurement, testing device

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