

Building a system of tests and diagnostics for the Toyota 4GR-FSE engine electrical system.

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Abstract: In the context of the increasing demand for periodic maintenance and early fault detection of automotive engine systems, this topic focuses on building a system of diagnostic tests for the Toyota 4GR-FSE engine. The objective is to develop methods for analyzing and predicting engine operating conditions through the collection and processing of data from vehicle sensors. The research methodology includes both theoretical aspects of system modeling and practical testing with a specific engine sample. The expected results are the ability to enhance maintenance performance, reduce repair time, and optimize engine performance through the use of advanced technology in the field of engine system diagnostics.

Keywords: Diagnostic inspection system, Toyota 4GR-FSE engine, diagnostic technology