

Diagnosis of Engine Condition with an Oil Condition Monitoring System

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The authors have developed an on-board lubricating oil condition monitoring system, for diesel-powered vehicle, consisting of an oil analyzer and a data logger capable of communicating with an external terminal via Wi-Fi. The performance of the system was evaluated using a bench test which artificially simulates internal engine wear and an on-track test using a commercial vehicle. The results of the tests showed that the monitoring system operated normally and was able to detect an increase in the concentration of iron powder in the engine oil.