Verification of Abnormal Wear Condition Monitoring Method Using Vibration of Transmission

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Driving devices used for diesel cars, such as diesel engine and transmission, have a potential of raising transport disorders when they are under abnormal conditions. It is desired to early detect an indication of an abnormality to prevent the failure. Therefore, we have been conducting research and development of a condition monitoring method using vibration, targeting driving devices. We carried out a bench test to simulate an abnormal condition, in which SiC was mixed into the transmission oil to promote wear inside the transmission. As a result of the test, it is confirmed that the abnormal wear of the transmission can be detected by applying the condition monitoring method for transmission using vibration is effective.