

Vibration diagnostic system for the undercarriage of five-axle wheeled vehicles consists of a first multiplexer connected to two accelerometers, which are used to record the vibration acceleration parameters of the vehicle's steered axle housing in the vertical plane, a second, third, and fourth multiplexers, connected to three pairs of accelerometers, respectively, which are used to record the vibration acceleration parameters of the housings of the vehicle's three intermediate axles in the vertical plane; a fifth multiplexer, connected to two accelerometers, which are used to record the vibration acceleration parameters of the rear axle housing of the wheeled vehicle in the vertical plane; and an analog-to-digital converter connected to the five multiplexers and a computing device, the input of which is connected to a monitor and a printer. One accelerometer is installed on each side of the driven axle, the three intermediate axles, and the rear axle of a wheeled vehicle to measure the vibration acceleration parameters of the vehicle's axle housings in the horizontal plane. Wherein, the accelerometers are mounted on the wheeled vehicle's axle housings and connected to multiplexers.