

Vibration diagnostic system for the undercarriage of seven-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, and the second, third, fourth, fifth, and sixth multiplexers, which are connected to five pairs of accelerometers, respectively, used to record the vibration acceleration parameters of the wheeled vehicle's intermediate axle housings in the vertical plane; and a seventh multiplexer, which is 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 seven multiplexers and a computing device, the output of which is connected to a monitor and a printer. One accelerometer is installed on each side of the steered axle, five intermediate axles, and the rear axle of a wheeled vehicle to record the vibration acceleration parameters of the vehicle's axle housings in the horizontal plane. The accelerometers are mounted on the wheeled vehicle's axle housings and connected to multiplexers.