

TECHNICAL DEMONSTRATION 1VIBRATION ANALYSIS TESTING OF A B-TRAIN

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Vibration properties can be investigated on a stationary vehicle using a servohydraulic shaker and a suitable array of vibration transducers and associated analysis equipment. In the demonstration a Tautliner B-train was excited at the rear left corner of the first trailer, and some of the modes of vibration were shown in actual motion. After this a demonstration was given of frequency analysis and subsequent computer display of animated mode shapes. Examples of similar work on the Rydewell tandem axle suspension were shown and implications for on the road operation discussed.